# Address in Obstetrics and Gynæcology,

*Delivered at the Annual Meeting of the British Medical Association, held at Newcastle-on-Tyne, on Aug. 4th, 1893,*

BY C. J. CULLINGWORTH, M.D. DURH., F.R.C.P. LOND.,

OBSTETRIC PHYSICIAN AND LECTURER ON MIDWIFERY AND DISEASES OF WOMEN, ST. THOMAS'S HOSPITAL.

## ON PELVIC PERITONITIS IN THE FEMALE, AND THE PATHOLOGICAL IMPORTANCE OF THE FALLOPIAN TUBES IN CONNEXION THEREWITH.

MR. PRESIDENT AND GENTLEMEN,—Twelve years have elapsed since the last Address in Obstetric Medicine was delivered before this Association. If, following the example of my predecessor, I had determined to occupy myself on this occasion with a review of the progress made in this great department of medicine during that time, I certainly should not have had reason to complain of any lack of material, as both in obstetrics and gynæcology the advances in our knowledge have been enormous, and for the very briefest survey of them I should require a much longer time than the hour that has been generously placed at my disposal. Even then I am doubtful whether the time would have been profitably employed. This work of review is now done so well in the various year-books and other similar publications, and in the annual presidential addresses delivered before the several obstetrical and gynæcological societies of the United Kingdom, that it appears to me to be undesirable to take up your time with it on an important occasion such as this. I propose, instead, to ask your attention for a short time whilst I endeavour to point out some of the advances that have been recently made in our knowledge of pelvic inflammations, and more especially of pelvic peritonitis. I have selected this subject for many reasons. It includes within its range the most common and, from their far-reaching effects upon the sufferer's health and usefulness, probably the most important of all the diseases of women. It almost equally concerns the obstetrician and the gynæcologist, and therefore fulfils, better than any other subject I could think of, the terms of your invitation—namely, that I should give an address in Obstetrics and Gynæcology. Again, the subject has now been delivered, or nearly so, from the bondage of theory and tradition and the authority of great names, and may at length be studied in the light of well-ascertained facts. And lastly, as it is always the safer and wiser plan for a speaker to choose as his topic that which he knows most about, this subject commended itself to me as being the one to which my own thoughts have been for some time past more especially directed.

### HISTORICAL.

At the time when Bernutz published his clinical memoirs it was the current belief that the hard swellings felt above the vaginal roof on one or both sides of the uterus in cases of pelvic inflammation were invariably due to inflammatory exudation in the connective tissue at the base of the broad ligament, or between its layers. Nonat had for ten years been upholding this doctrine, and under the influence of his authority and dogmatic teaching it had come to be almost universally accepted. Various names were given to these exudations, but whether they were described as pelvic cellulitis or parametritis or periuterine phlegmon, there was practically no difference of opinion as to their seat. For some time Bernutz himself participated in the common belief. The fatal termination, however, of two cases under his care served effectually to change his views, and enabled him "to prove incontestably that the periuterine tumour, which during life presented all the symptoms of the so-called periuterine phlegmon, was not situate in the cellular tissue at all. In the necropsies in question the tumour, which even after death presented all the usual signs, was seen to be formed by the pelvic viscera matted together by peritoneal adhesion." Bernutz did not, as he is sometimes erroneously represented to have done, deny the existence of a phlegmon or inflammatory exudation between the layers of the broad ligament, especially in puerperal cases; but he considered their occurrence to be rare as compared with the swellings due to pelvic peritonitis, and he himself never met with one in the post-mortem room. The late Dr. Matthews Duncan, indeed, recognised the great value of the papers of Bernutz, but he only accepted his doctrines in a very modified form. If Dr. Matthews Duncan, with his usually keen and generous appreciation of sound scientific work, thus failed to estimate the results of Bernutz's observations at their true value I suppose it is no great wonder that other and lesser men failed to do so. I will not detain you by inquiring into the reasons for this widespread neglect, further than to remark that the new views might possibly have attracted more attention had it been made to appear that they had any important bearing upon treatment. Many years, however, were destined to elapse before the discoveries of Bernutz found a practical application, and even then it was not, in the first instance, as a direct result of those discoveries but as an outcome of that surgical enterprise which, just as it has opened new avenues of knowledge and new possibilities of relief and cure by operative treatment in the case of the kidney, is doing the same for other organs of the body, and notably for those which are chiefly concerned in the production of pelvic peritonitis. In the year 1872 the operation for the artificial induction of the menopause by the removal of the healthy Fallopian tubes and ovaries was carried out by three operators of different nationalities at dates so closely following one another, and yet at places so remote, that it was practically impossible for there to have been any sort of concerted action. At the instance of Dr. Marion Sims, the operation has been named after his compatriot Dr. Battey, who appears to have conceived the idea of the operation seven years before he had an opportunity of carrying it out, and who certainly can claim the credit of having been the first to publish his case and to bring the whole subject before his professional brethren for discussion. In the years 1879 and 1880 Hegar in Germany and Lawson Tait in this country operated on several patients for the removal of inflamed ovaries and tubes, and it was then that the accuracy of the observations of Bernutz came to be fully recognised and his apparently barren discoveries to bear their legitimate fruit.

### PELVIC CELLULITIS COMMONLY A SECONDARY DISORDER.

During the past five or six years I have performed abdominal section in nearly one hundred cases that in the earlier part of my professional career I should have regarded as well-marked examples of pelvic cellulitis—namely, in cases in which the mobility of the uterus was more or less impaired and in which hard, irregular and fixed swellings could be felt above one or both lateral fornices of the vagina and often extending into Douglas's pouch. In the vast majority of those cases I found no evidence of cellulitis at all and where it did exist it was clearly secondary to the salpingitis and peritonitis which constituted the principal lesions present. In no case was there any inflammatory exudation in the cellular tissue of the broad ligament or elsewhere sufficient to form a distinct tumour recognisable as such on bimanual examination. In some cases of chronic suppurative inflammation of the uterine appendages the broad ligaments were the seat of a certain amount of thickening from inflammatory exudation, but this was the case only in the neighbourhood of the suppurative disease, and the thickening seldom exceeded one-eighth of an inch, and even in extreme cases never exceeded half an inch.

### PELVIC INFLAMMATION USUALLY A PERITONITIS ORIGINATING IN SALPINGITIS.

The usual state of things disclosed on opening the abdomen in these cases is as follows. The contents of the pelvis are generally concealed from view by the great omentum, which has been drawn down so as to cover them anteriorly, and has contracted adhesions to the peritoneum as it becomes reflected on to the anterior abdominal wall, as well as to the uterus and other pelvic viscera. Together with this screen, as it were, of omentum it is not unusual to find coils of adherent small intestine. On separating and drawing aside this screen one side or it may be the whole of the posterior part of the true pelvis is seen to be occupied by what appears to be an indistinguishable mass of matted viscera. The uterus itself is sometimes implicated in the mass, but in other cases its upper part at least is free. Tracing the Fallopian tube outwards from the uterine cornu on the side of the disease it is often found to be normal in size for the first half-inch or so and then to become involved in the adherent mass. This mass, on being separated and brought into view, is invariably found to consist of the uterine appendages more or less altered by inflammation. There is always salpingitis and the inflamed and thickened tube usually enfolds the

ovary. In a large number of cases the ovary itself is normal, except that it is universally adherent, but in other cases it is in a condition of incipient cystic degeneration. I do not allude to the harmless condition, sometimes spoken of as incipient cystic degeneration, in which several Graafian follicles distended with serum cause transparent projections from the surface of an otherwise normal ovary, but to that condition in which true cysts are found, varying in size from a marble upwards, and in which the normal structures of the organ have become more or less replaced by them. Whenever the lateral swelling is so large as to push the uterus to the opposite side this condition of the ovary may be suspected. In many cases the cysts in the ovary are found to be in a state of suppuration, their contents having presumably become infected from the inflamed and suppurating Fallopian tubes. Of primary ovaritis, either acute or chronic, which is supposed by some authorities to be a common affection and a frequent cause of pelvic peritonitis, I have scarcely (apart from tuberculous disease) met with a single example. With regard to the tubes the first point to be noted is that the evidences of peritoneal inflammation are always most marked in the neighbourhood of the fimbriated end, showing clearly that the pelvic peritonitis has originated by direct extension from the mouth of the inflamed tube or by the escape of morbid secretions therefrom. Where the secretion from the inflamed tube is chiefly mucous in character, with only a slight intermixture of pus corpuscles, the intensity of the inflammation around the abdominal ostium is shown by the extreme density of the adhesions at that spot and by nothing more. Where the secretion, on the other hand, is wholly purulent one of two things is found to have happened, according to whether the fimbriated end has remained patulous or has become closed. In the former case an intra-peritoneal abscess is found encysted amongst the adhesions and fed by the purulent discharge issuing from the open mouth of the suppurating tube.[1] In the latter case the pus, accumulating in the occluded tube, distends it, sometimes uniformly but more often irregularly, and forms a series of loculi or pouches full of pus here and there along the tube, in either case constituting the condition known as pyosalpinx. The changes in the walls of the tube are as follows. In acute cases the mucous membrane, including the projecting longitudinal folds, is found to be highly congested and swollen and also to be covered with purulent or muco-purulent secretion. In chronic cases the condition varies according to whether the inflammatory secretions are pent up within the tube or have made their escape from the open fimbriated end. In the former case the mucous membrane is either distinctly ulcerated or is covered with granulation tissue; in the latter, having got rid of its secretions, it is often found to have resumed more or less completely its normal appearance, except in the neighbourhood of the adherent abdominal ostium, where it is frequently intensely congested and œdematous. The most striking change in chronically inflamed tubes is due to the extension of the inflammation to the middle or muscular coat, which becomes greatly thickened and indurated from inflammatory exudation amongst the connective tissue elements of the muscular layer, causing irregular separation of the muscle fibres and producing a general thickening of the tube wall, which often measures from one-eighth to half an inch in thickness. The enlargement of the tube is not only manifested in an increase in its width and circumference, but frequently also in an increase in its length; and as this increase in length takes place within a confined space it frequently results in the tube becoming doubled and folded upon itself, thus forming an intricate series of convolutions. Sometimes the convolutions take a sharp turn, forming knuckles on the external aspect and shutting off by the suddenness of the bend one portion of the canal from the other. In advanced cases further changes may take place. The pus-containing tube, becoming adherent to a cystic ovary, its wall may ulcerate and perforation may occur, thus permitting the escape of the purulent contents of the tube into the interior of the cyst and the formation of a tubo-ovarian abscess. The result of such an accident is a sudden and most violent attack of pelvic peritonitis, placing the life of the patient in imminent peril. It must not, however, be supposed, whenever an inflamed and purulent tube is found suddenly to lead into a large abscess cavity—giving an appearance that has been happily compared to that of a retort—that the condition is necessarily one of tubo-ovarian abscess. I have recently pointed out that a tubo-ovarian abscess may be simulated by a sudden expansion of the tube itself, forming a curious and interesting variety of pyosalpinx. There are two examples of this in the museum of St. Thomas's Hospital, in one of which the true nature of the specimen was proved beyond doubt by the fact that both the patient's ovaries were seen during the operation to be absolutely healthy; they were not even adherent. I cannot produce the ovaries in proof of my statement, for they still remain in the body of the patient, who made an excellent recovery.

[1] Pelvic abscesses bursting into the rectum or into the vagina are almost always of this nature and not of cellulitic origin, as has been commonly supposed.

### COMPLICATIONS OF SALPINGITIS.

Amongst the secondary changes that occur as a consequence of these inflammatory processes there are one or two of such importance as to call for special mention. When the salpingitis is unilateral it is not at all unusual to find that the peritonitis, spreading from its place of origin—the fimbriated end of the inflamed tube,—has passed over to the other side of the pelvis, involving the healthy uterine appendages of that side in a mass of adhesions. Under such circumstances closure of the abdominal ostium of the healthy tube is apt to occur and to be followed by the development of a hydrosalpinx, which, though then simply an incident in the course of an attack of pelvic peritonitis, may in its turn itself become a source of suffering and ill health. In my experience this is the commonest mode in which hydrosalpinx is developed. Hæmatosalpinx, as a complication of salpingitis, is much more rare. In the great majority of cases hæmorrhages within the tube and hæmatoceles of tubal origin are the consequence of tubal gestation, but now and then they occur as incidents in the course of the inflammatory processes I have just described and quite independently of gestation. An instance of this kind is recorded in the recently issued volume of the St. Thomas's Hospital Reports. There are, of course, many other secondary changes met with in old-standing cases of pelvic peritonitis besides those I have enumerated, but I have not time to dwell upon them. The outcome of a knowledge of the facts I have laid before you is to give to the Fallopian tubes an enormous importance in the pathology of pelvic inflammation. The pathological importance of the Fallopian tube is due to its peculiar anatomical position in the human subject. There is, so far as I am aware, no other mucous canal in the body similarly situated. It is exposed to constant risk of infection owing to the direct continuity of its lining membrane with that of the uterus and vagina, so that it is almost by a miracle if it escapes in any case of acute infective endometritis, whether septic or gonorrhœal; but there is the widest possible difference between the danger of an acute endometritis and an acute endosalpingitis. In the former the patency of the cervical canal provides a natural outlet for the morbid secretions, but in the latter there is no such natural outlet. The uterine end of the Fallopian tube has, even under normal circumstances, a lumen only just large enough to admit a fine bristle. It will therefore be readily understood that it only requires a very slight amount of swelling of the mucous membrane, such as is probably inseparable from the mildest inflammatory attack, to close that end completely, with the result that, as an outlet for inflammatory secretions, the uterine orifice may practically be regarded as non-existent. The position of matters, therefore, is that either there is no outlet at all for the morbid secretions, owing to the closure of one orifice by the swollen mucous membrane and the closure of the other by adhesions, or the only outlet is through the abdominal ostium into the peritoneal cavity. It is this fact of the absence of a safe outlet for inflammatory products that makes an attack of suppurative salpingitis so much more serious a matter than an equally severe attack of suppurative endometritis, and that invests the inflammatory affections of the Fallopian tube generally with such an exceptional and grave importance.

### IMPROVEMENTS IN DIAGNOSIS.

It is not only in pelvic pathology, however, that we have been recently enabled to add to our knowledge; our powers of diagnosis also have been enlarged. Not long ago the idea of being able to map out and examine the uterine appendages in the living subject would have been derided. To-day I should be ashamed if any of my clinical clerks were to be found, at the close of their three months' tenure of office, unable to diagnose, under reasonably favourable circumstances, the size, position, consistence and mobility of the Fallopian tubes, even if not of the ovaries as well, with a fair

amount of accuracy. The improvement has been reached in the only way that improvements in diagnosis can be reached—namely, by habitually making as accurate and as careful a diagnosis as we are capable of making and by bringing it to the test of actual fact whenever an opportunity offers. In the case of many diseases such opportunities only occur in the post-mortem room, but as regards the diseases that we are now considering frequent opportunities have of late been afforded in the operating theatre also, with the result that the diagnosis of these diseases is in a fair way of being revolutionised. Considering how much there is still to be learnt, it behoves every gynæcological operator to be careful not to miss a single opportunity of thus adding to our knowledge. In order to make a satisfactory bimanual examination in a suspected case of pelvic inflammation I believe it to be essential that the patient should be in the dorsal position, with the knees flexed and separated, the head supported on a single pillow and the shoulders not raised, as is generally recommended, but lying flat on the couch or bed. To avoid strain—and no examination can ever be satisfactory in which the posture of the examiner involves the least strain—the examiner should stand or sit directly in front of the patient, for only in this way can full advantage of the bimanual method be obtained. I know that it is usually recommended, more particularly in Scotland, that the examiner, even when the patient is in the dorsal position, should stand at the patient's right side whilst conducting the bimanual examination; but consider for a moment what that position involves—the two hands are at right angles to each other. By facing the patient this awkwardness is avoided; the hands and forearms are parallel to one another and the necessary manipulations are thereby carried out more effectually because more easily. With regard to the respective merits of the dorsal position and the left lateral—or English obstetric—position for purposes of bimanual examination there seems to me to be really no room for discussion. No one who has once accustomed himself to place his patients in the dorsal position and has experienced the vastly increased ease with which the deeper parts of the pelvis can be thus explored will ever willingly revert to the older plan. It has been said that the dorsal position is less modest than the position on the left side and that it is therefore more trying to the feelings of the patient; but is this really the case? When a woman has made up her mind to submit to the ordeal of an examination at all she has done so because she wishes to know what is the matter with her, and she would certainly prefer, if the question were put to her, to be examined by that method which would best enable the examiner to form a correct opinion and to give her the information she seeks.

### IMPROVEMENTS IN TREATMENT.

I have called attention in the earlier part of this address to some of the indirect benefits that have accrued from operations undertaken for the removal of the uterine appendages, but I have said nothing so far as to the value of these operations considered in regard to their primary object—namely, as a mode of treatment. It is desirable, in the first instance, to make a clear distinction between the operation for the removal of the uterine appendages when there is no obvious lesion of either tube or ovary and the same operation when those parts are the seat of manifest disease. Probably owing in some measure to the fact that the one operation grew, as it were, out of the other, the two operations are continually being confounded both by speakers and writers, to the great perplexity of the uninitiated. The scope of Battey's operation—that is, the operation for the artificial induction of the menopause—never very wide, has become narrower and narrower as experience has increased, and it is now practically restricted to the treatment of certain cases of uterine myoma. As a means of relieving neurotic conditions it is so terribly open to abuse, it raises so many difficult questions that are better left undisturbed and it has proved so uncertain and disappointing in its results even when legitimately applied that it is now thoroughly and in my opinion properly discredited. At the same time we must never forget that it is to the men who first conceived and carried out Battey's operation that we owe not only a method of dealing with uterine myomata that has saved many a life but also that further development of pelvic surgery, of which I come now to speak, and which, in my opinion, is one of the greatest triumphs of modern gynæcology. I refer, of course, to the operation for the removal of the uterine appendages when they are the seat of serious disease. I have so recently had an opportunity of laying before the profession at considerable length the grounds on which I feel myself justified in advocating and practising this operation that it can scarcely be necessary for me, even if there were time, to enumerate them upon this occasion. I propose, instead of entering into an elaborate argument, to relate, in briefest outline, one or two cases in order to illustrate and contrast the result of operative and non-operative treatment.

### OPERATIVE AND NON-OPERATIVE TREATMENT CONTRASTED.

In August of last year a thin, emaciated woman aged thirty-seven, but looking much older, was admitted to the South-Western Fever Hospital in London, supposed to be suffering from enteric fever. She had lived a dissolute life, was living apart from her husband and showed well-marked evidence in the palate of having suffered severely from constitutional syphilis. There was a distinct history of gonorrhœa. She had been ill for three weeks with headache and loss of appetite, and for four days before her admission she had suffered from pain in the abdomen and from diarrhœa. The abdomen, on admission, was found to be somewhat distended and tympanitic, the tongue was dry, the pulse was rapid and feeble and the temperature was 103°. There were no spots and the chest sounds were normal. On vaginal examination the whole of the posterior part of the pelvis was found to be occupied by a firm, hard mass. Early in the morning of the second day after admission she passed a large quantity of extremely offensive purulent fluid from the vagina and four hours later she died. At the necropsy a considerable quantity of semi-purulent fluid was found in the abdominal cavity, the contents of which were much matted together by adhesions, especially towards the pelvis. The uterus was somewhat enlarged and its mucous membrane was hyperæmic. Both Fallopian tubes were found to be thickened and enlarged and were full of pus. They were curled back upon themselves and their fimbriated ends, closed by inflammatory adhesions, were adherent to one another in Douglas's pouch. The remainder of the back of the pelvis consisted of a large abscess cavity, which contained much offensive pus. This abscess cavity was found to communicate with the interior of the right Fallopian tube through an ulcerated opening in the tube wall; it also communicated with the general peritoneal cavity and, through a small round opening in the posterior fornix, with the vagina. The ovaries were of normal size and were embedded in the walls of the abscess cavity. There were no signs of intestinal ulceration or of disease of the cæcum or its appendix, and the other organs of the body were healthy.

Here is another and still more recent instance of death resulting from rupture of a pyosalpinx. On April 8th of the present year there was admitted into the medical wards of St. Thomas's Hospital a very stout married woman aged forty-one with symptoms of general peritonitis and in a state of collapse, as though from intestinal perforation. For some months she had had an offensive vaginal discharge. Her present illness had commenced a day or two before admission. She was practically moribund when she arrived at the hospital and died a few hours later. At the necropsy evidence of general peritonitis was found, being most intense in the pelvis. The abdomen contained about a pint of highly offensive pus. Both Fallopian tubes were greatly and about equally distended, being equal in size to a piece of intestine. They were much distorted and were doubled backwards on themselves. Each of them was closed at both ends and contained about an ounce of the most intolerably fetid pus. On the anterior wall of the left tube, somewhere about its centre, was a perforating ulcer through which pus could be squeezed. There was no other serious disease in the body, except that the mucous membrane lining the cavity of the uterus was found to be intensely inflamed and a small, soft, ulcerated and gangrenous polypus projected into it from the left side of the fundus. Both these are examples of chronic disease ending fatally. Occasionally, however, tubal disease terminates fatally at a much earlier stage, as in the following case, the notes of which have been placed at my disposal.

A healthy and well-built young woman aged twenty-seven was a few years ago admitted into one of the wards for infectious disease at St. Thomas's Hospital with acute but ill-defined febrile symptoms, which had commenced four days previously. She had been nursing some cases of diphtheria and as she had slight soreness of the throat, with shivering, severe headache, vomiting and aching of the limbs, it was thought that she had contracted the infection. Her temperature

on the day of admission was 102° and on the following day it was 104°. On the third day she complained of some abdominal pain and the evening temperature was 104·6°. At the end of a week the abdomen became somewhat distended. From that time the symptoms were those of general peritonitis. She died on the thirteenth day after admission, the temperature an hour before death having risen to 105·6°. At the necropsy there were evidences of acute general peritonitis, being most marked in the pelvis. There was little or no fluid in the abdominal cavity, but abundance of lymph and much glueing together of the intestines and other abdominal viscera. In the pelvic cavity there was an ounce or more of thick pus. The uterus was much involved in adhesions, but was otherwise healthy. Both Fallopian tubes were acutely inflamed and on making pressure upon them thick yellow pus in considerable quantity exuded from the outer extremity of each. The inflammation was most marked on the right side. The right ovary was larger than the left and appeared to be congested; the left was quite healthy. All the other organs of the body were healthy, except that the lungs were somewhat congested and were œdematous.

Such is a brief account of three cases of purulent salpingitis that proved fatal owing to escape of the contents of the tube into the peritoneal cavity; in two instances through a rupture of the tube wall and in the third through the still unclosed fimbriated extremity of the tube. I propose now, by way of contrast, to relate three cases of a very similar character to the foregoing, in which the diseased tubes were removed by operation. I have told the story of the first case before, but it will bear to be told again.

A young woman, with a worn, pale face and wretchedly thin, was admitted into hospital on account of severe pain in the lower part of the abdomen with pyrexia. She had been married five years, but had been separated from her husband for three years, and during this time had had to maintain herself and her two children by dressmaking. Only once during the three years of their separation had the husband and she cohabited, and on that occasion, which was twelve months befor her admission, he infected her with gonorrhœa. In a few weeks she became too ill to continue at her work and had to give up her home and go into the parish infirmary with her children. She came out in three or four months, but soon had to return. She again took her discharge and resumed her occupation, but her health soon gave way again. She suffered great pain in the lower part of the abdomen, in the groins and in the back, and eventually sitting became so difficult and painful that she had to relinquish her employment and for some weeks before admission she had subsisted through the generosity of friends. The pelvis was filled with a hard, irregular mass, especially to the right of the uterus and behind it. The uterus was of normal size, was pushed over to the left of the middle line and was fixed. Abdominal section was performed. The posterior part of the pelvis was occupied by a mass of adherent viscera which was difficult to recognise and separate. Both tubes were thickened and much distended, and each communicated by its open fimbriated end with an intra-peritoneal abscess, being fed, evidently, from the suppurating tubes. The patient, notwithstanding that she had a severe attack of pneumonia after the operation, eventually made an excellent recovery, lost her pain and ill looks and became a picture of good health.

The next case I have selected is that of a young married woman aged twenty-four, the mother of three children, who was admitted to hospital complaining of severe pain in the back and in the left iliac region, the symptoms having come on suddenly four days previously. Her temperature varied from normal to 102·2°. She had had a similar attack three months previously, but in the meantime she had been fairly well. The pain disappeared after the patient had been in the hospital twenty-four hours, but as there was in each posterior quarter of the pelvis a dense, irregular mass, a portion of which could be felt as a tortuous and thickened tube, and as it appeared certain that the case was one of chronic purulent salpingitis, it was thought the safest plan to operate. This decision proved to be a fortunate one for the patient. The operation was performed. Both tubes were found to be irregularly dilated and occluded and were full of pus. Their walls were a quarter of an inch thick and they were so deeply ulcerated that in places only the peritoneal coat remained. On the anterior surface of the right tube, at a point where the wall was specially thin, there were two small perforations through which pus was escaping. Probably these openings were made during the separation, but it was manifest that even if perforation had not already taken place it was on the point of doing so. A delay of even a few days would have exposed this patient to a very serious risk. She made an uninterrupted recovery, and when seen sixteen months later she looked so stout and well as to be scarcely recognisable. She had had no pain since the operation and was in better health than she had been for several years.

The third and last case I desire to bring before you resembles in some of its features that of the nurse whose case I related in the first series. A servant at an hotel reported one evening to the manager that she had been violated by a stranger staying in the hotel. The offender was summarily expelled, but the girl gave notice to leave. During the five weeks she remained in her situation she experienced some pain on micturition and a vaginal discharge. The morning after she left she felt some pain in the right wrist. Three days later she was admitted under the care of one of my colleagues at St. Thomas's Hospital, supposed to be suffering from acute rheumatism. She suffered from pain and tenderness in several of her joints, without obvious effusion or redness of skin. Her temperature was frequently as high as 102° and sometimes reached 104°. Five weeks after admission a vaginal discharge was noticed and a few days later a suspicion already existing in my colleague's mind that the case was not one of ordinary acute rheumatism was confirmed by the patient complaining of pain in the lower part of the abdomen. I was thereupon asked to see the patient and to examine her. I reported that she was suffering from gonorrhœa, with pyosalpinx, pelvic peritonitis and pyæmia. She was transferred to my care and a week later I operated. The pelvic viscera were matted together by peritoneal adhesions and the Fallopian tubes were thickened and full of pus. Behind the uterus and walled in by adhesions was an abscess of the size of a Tangerine orange which was fed by the two Fallopian tubes through their open fimbriated ends. The result of the emptying of the abscess and the removal of the tubes was immediate and striking. The pyæmic symptoms rapidly disappeared, the parts concerned in the operation healed without a trace of suppuration and the patient made a complete and excellent recovery.

Can there be any reasonable doubt that the lives of the first three of these six patients might have been saved by timely operation or that the lives of the last three were so saved? Do not let me be misunderstood. I do not for a moment suggest that every case of inflamed Fallopian tubes should be operated upon; on the contrary, I am of opinion that most of them recover without doing so, but there is a large residuum of cases—most of them chronic, some few acute—in which nothing but an operation can save life. And there is a still larger number of cases where a timely operation rescues the patient from years of misery, incapacity and chronic invalidism.

## A CASE OF PANCREATIC HÆMORRHAGE AND FAT NECROSIS, WITH A CONSIDERATION OF ACUTE INFLAMMATION OF THE PANCREAS.

BY HERBERT P. HAWKINS, M.B. OXON, M.R.C.P. LOND. M.R.C.S. ENG.,

ASSISTANT PHYSICIAN TO ST. THOMAS'S HOSPITAL AND TO THE LONDON FEVER HOSPITAL.

THERE is scarcely any organ so little liable to disease as the pancreas. It is occasionally the seat of a pyæmic abscess and of a new growth; its duct may be blocked by a calculus, a cyst may develop in its substance and it has been clearly established that some cases of diabetes are dependent upon morbid changes in its structure. These conditions are either of secondary importance or of a very chronic nature. Very different from them in course and result are the two conditions of (1) hæmorrhage into its interstitial tissue and (2) acute inflammation of the gland. The first of these is thought to be invariably fatal, death sometimes occurring in thirty minutes, at other times being delayed for thirty-six hours. The second is less acute, but almost equally fatal; it usually kills the patient in less than a week, and death is, perhaps, more distressing than in disease of any other abdominal organ. As regards hæmorrhage into the pancreas recorded

cases have been accumulating in the last few years, though they have not attracted much attention in this country. More exact observation, however, is needed before the causation of the occurrence can be understood. The following case is a good example.

A man aged forty was admitted into St. Thomas's Hospital on Nov. 20th, 1892, under the care of Dr. Hørley. He had had typhoid fever ten years before and one attack of either gout or rheumatism. With these exceptions he had been a strong, healthy man, but he had been in the habit of drinking more than a moderate amount of spirits. His father died of dropsy and his mother of diabetes; his three sisters enjoyed good health. The question of syphilis was not put to him. On Nov. 18th he had some slight intestinal trouble and consequently took two liver pills of unknown nature. The next morning his bowels acted several times; he was sick after breakfast and was then seized with a most acute pain in the abdomen. On Nov. 20th he was admitted into hospital. He was then pale, cold and collapsed, with a temperature of 96·4°. He was suffering from severe pain across the middle of the abdomen and at a corresponding point in the back, and was very thirsty and restless. The abdomen was somewhat distended, but showed nothing abnormal beyond some tenderness over the situation of the kidneys. There was no sign of disease in the chest. His urine was of a dark colour and contained one-twelfth albumen, but no blood. In the course of the next day, the 21st, he passed seven stools containing a little mucus and blood. His great distress was somewhat relieved by a warm bath and hot fomentations to the abdomen, but there was no real improvement. The pain and collapse continued and in the evening he was found dead in bed, nothing special having called the nurse's attention to him. The whole illness had lasted sixty hours. At the post-mortem examination the body was found to be strongly built and well nourished, containing rather more than a moderate amount of fat. On opening the abdomen the first impression was that rupture of an aneurysm had occurred. The peritoneal cavity contained about a pint of bloody fluid and a mass could be felt in the middle line seated on the upper part of the abdominal aorta. This mass, however, proved to be the pancreas. It was six inches long, greatly increased in bulk and it weighed rather more than twelve ounces. At the head of the gland its structure could not be recognised; it was black with infiltrated blood. This condition became less intense towards the tail, though the whole gland was affected, and at the part where the change was least marked it could be seen that the interlobular septa were infiltrated with blood and the gland tissue was of a dirty brown colour. There was very extensive hæmorrhage under the peritoneum, limited to the posterior half of the abdomen. There was fluid blood around each kidney and on the front of each psoas, but the greatest amount of extravasation had occurred around the pancreas, which was embedded in clot and fluid blood, and it was clear that the whole of the retro-peritoneal blood had travelled from a spot in the head of the pancreas. The liver was somewhat fatty and the kidneys were unduly full of blood. There was no disease of the stomach or intestines. All the large arteries and veins of the abdomen were opened up without any sign of disease being discovered; but the vessels belonging to the portal system were unusually full of blood. The condition of the solar plexus was not ascertained. The omentum, the subperitoneal fat of the abdominal wall, the perinephric fat and more especially the pancreatic fat (where it was not obscured by the hæmorrhage) showed a thick sprinkling of specks and nodules of dead-white material, the condition being that which was described by Balser[1] as fat necrosis. The largest of these nodules were rather larger than mustard seeds, and they had the shape and arrangement of the normal fat lobules surrounding them. The appendices epiploicæ were not affected and there was no visible change in any fat other than that in immediate connexion with the peritoneum. The heart weighed fifteen ounces and showed some hypertrophy of the left ventricle, and there was some thickening of the mitral valve without incompetence. There was a moderate amount of atheroma in the arch of the aorta.

The diagnosis of such cases as this is important, not from any hope of successful treatment, but from their close resemblance to acute peritonitis and intestinal obstruction; it is important also from a medico-legal aspect. This sudden fatal hæmorrhage into the pancreas—"apoplexia abdominalis pancreatica"—was recognised by Friedreich[2] in 1875. He mentions the three cases reported by Zenker,[3] as to which there can be no doubt, and quotes Klebs' belief in its occurrence. Numerous instances have been subsequently recorded which place it among the recognised causes of sudden death in apparently healthy individuals. A full account is given by Prince,[4] and five typical cases are clearly recorded by Draper.[5] Finally, in the admirable monograph by Fitz[6] on the subject of acute pancreatic disease may be found a complete description of this affection drawn largely from his own experience. He says that the attack usually occurs suddenly in male adults, seldom under the age of forty-five, who are apparently in good health at the time, but who have been more or less intemperate. The onset is marked by severe pain in the abdomen or lower part of the chest, and there may be nausea or vomiting, a desire to defecate or the passage of frequent stools, with intense thirst and restlessness. The most constant feature, however, is the rapid and hopeless collapse, which is present almost from the first, and death may take place in thirty minutes or may be delayed for thirty-six hours. The suddenness of death is most striking. The course of the illness may be gathered from the expressions found in the table of cases given by Fitz, such as "found dead in bed," "found dead in a chair as if asleep," "died suddenly whilst talking to a companion." The explanation of this rapid collapse and death, which was suggested by Friedreich[7] seems probable enough. The pancreas is possibly possessed of functions which are not well known, but it probably has no function the abolition of which could lead to death in half an hour. Nor can death be attributed to mere loss of blood. It must be ascribed to the sudden pressure exercised by the swollen organ on the solar plexuses and the semilunar ganglia with which the pancreas is in immediate relation. The actual cause of the hæmorrhage is still unknown, but I doubt whether in any case of the kind the intra-pancreatic vessels have ever been thoroughly examined. The suddenness of the onset and the fact that death may occur in such a short space of time, may be taken as strong evidence that the blood is shed from a large artery in the substance of the pancreas. Moreover, the post-mortem appearances in all cases seem to show that the bleeding occurs at some one spot and that the blood travels thence through the loose interstitial tissue of the organ, in most cases forcing its way also into the general retro-peritoneal connective tissue, with which the interstitial tissue of the pancreas is continuous. It is a condition of great rarity, and nothing like it occurs in any other abdominal organ. It has, however, certain points of resemblance to cerebral hæmorrhage in the laxness of the tissue in which the arteries are embedded and in the age and class of the patient in whom it occurs. In the absence of definite knowledge, perhaps, arterial disease in vessels smaller than those usually examined in post-mortem work is the most probable explanation, but the suggestion of Klebs that it may be due to the action of the pancreatic secretion must be borne in mind.

The microscopical characters of the pancreas in this case are interesting as bearing on the nature of that condition which has been described as "acute pancreatitis." In the first place there are lobules here and there, especially towards the splenic end of the gland, which may or may not show a few blood corpuscles in their interior, but which have a perfectly healthy epithelium. Most of the lobules, however, show complete necrosis and disintegration. The outline of the cells can hardly be distinguished and they take no stain; they are no longer arranged in tubular form, but lie in irregular clumps, with much granular débris around them; their nuclei are not stained by fuchsin or logwood. Between these two extremes every degree of the necrotic change can be seen. In osmic acid preparations there is no appearance of fatty degeneration of the cells. As regards the interlobular septa, they are in places healthy or nearly so, but for the most part their fibrous structure is obscured either by recently shed blood or by disintegrating blood clot, and many of them are thereby enormously swollen, so that the lobules contained in their meshes are subjected to considerable compression. Of the structures contained in the septa the ducts cannot with certainty be distinguished as they are probably filled

[1] Virchow's Archiv, xc., 520.

[2] Ziemssen's Handbuch der Pathologie und Therapeutik, vol. viii., p. 621.

[3] Deutsche Zeitschrift für Praktische Medicin, vol. ii. 1874, p. 351.

[4] Boston Medical and Surgical Journal, July 13th, 1882.

[5] Transactions of the American Association of Physicians, vol. i., 1886, p. 243.

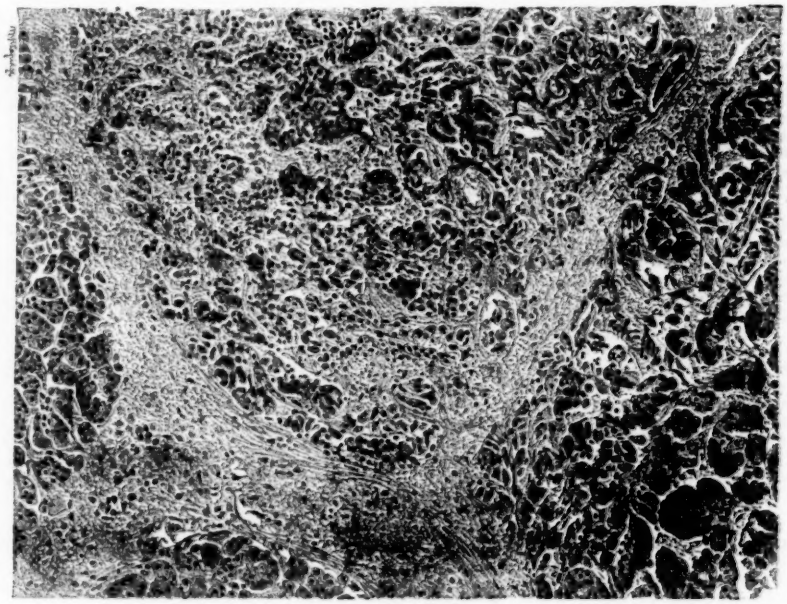
[6] Middleton: Goldsmith Lecture, 1889.

[7] Loc. cit.

with blood and clot; the arteries are mostly empty and compressed and their walls are necrosed, whilst the veins are uniformly thrombosed. (Fig. 1.) Where fat cells lie in the affected septa or inside necrosed lobules the fat is invariably converted into tufts of feathery crystals, the so-called "fat necrosis," and around such spots, but also occurring elsewhere, are bunches of orange crystals, presumably derived from the blood. There is very little evidence of an inflammatory process. Here and there in the affected septa are a few clumps of leucocytes and a certain number can be seen penetrating the necrotic lobules from their periphery, but the appearance is not such as to warrant speaking of the condition as an acute pancreatitis. Neither by Gram's method nor by the use of fuchsin can any micro-organisms be discovered. (Fig. 2.) It is clear, then, from the microscopical examination that the morbid process is twofold. There is (1) hæmorrhage into the interlobular septa and (2) death of the secreting epithelium. It is possible, of course, that some agent which is not yet known is the cause of both these processes, but they have a definite relation which suggests that the one is the cause of the other. Where the septa are intact the lobules show a healthy epithelium, where there is a little hæmorrhage into the septa the epithelium shows commencing necrosis, and where they are filled with blood until they are five or six times their normal breadth there necrosis and disintegration of the epithelium are complete. The change in the epithelium is the coagulation necrosis of Weigert, and it is probably produced here, as in the similar case of infarction of the kidney, by stoppage of the arterial blood-supply. Many observers have suspected an embolic origin in these cases, but it seems impossible that any arterial embolism or thrombosis can simultaneously affect the whole pancreas. Its blood-supply is so manifold, it is fed by at least three arteries of which the branches enter it at intervals along its whole length, so that nothing short of blocking of the cœliac axis could produce a total infarction of the organ. In this case, as in all other recorded cases, there was no disease or blocking of the arteries, so far as they could be opened up with scissors. The observed condition of the septa seems, however, amply sufficient to explain the death of the epithelium; for the arteries of the pancreas lie in the septa, giving off small branches, which form a capillary network in and around the lobules, and in the condition here described blood is seen to be forced into the septa in all directions, splitting up the fibrous bundles and exercising a general compressing effect, which is certainly powerful enough to obliterate the nutrient vessels as they enter the lobules.

It may be questioned whether some at any rate of the cases described as acute pancreatitis should not be regarded as cases of primary hæmorrhage into the gland, as in the specimen here recorded, with the supervention of inflammation around the necrosed parts. If the patient survives the first shock of the hæmorrhage, and the destruction of gland tissue is not too extensive, there is no pathological reason why the necrosed parts should not be removed, as in the case of infarction of the kidney. In fact, one undoubted case of recovery is mentioned by Osler,[8] in which the condition was recognised by abdominal exploration. It must be remembered, however, that the acini of the pancreas are in full communication with the intestinal canal. Consequently, a secondary inflammation around the necrosed parts with the appearance of micro-organisms is not an unlikely event, and it is highly probable that in the form described as "hæmorrhagic pancreatitis" the inflammation is really of this secondary nature. Inflammation of the pancreas, apart from a pyæmic suppuration, is a very rare condition, and many observers have never met with it. Klebs,[9] for example, was fully aware of the occurrence of hæmorrhage into the pancreas and appreciated the rapidity with which death ensues. He describes cases "where the gland is of a dark-red or violet colour; the meshes of the interstitial tissue are filled with fresh or altered blood and the acini are dull grey and generally blood tinged." He was of opinion that this hæmorrhagic condition, if not immediately fatal, might lead secondarily to inflammation and suppuration with sloughing of the gland, but he was sceptical as to the occurrence of a primary inflammation of the pancreas as certified by microscopical examination. Friedreich[10] gives a detailed description of acute primary pancreatitis, though the examples cited are certainly open to criticism. Fitz[11] has definitely shown that it occurs with much greater frequency than was generally supposed, and the disease has found a place in Osler's "Text-book of Medicine." Now a large percentage of the cases recorded by Fitz and two of the four cases given by Friedreich were attended by severe hæmorrhage into the gland, and the hæmorrhage has been looked upon as an accidental accompaniment of the inflam-

FIG. 1.



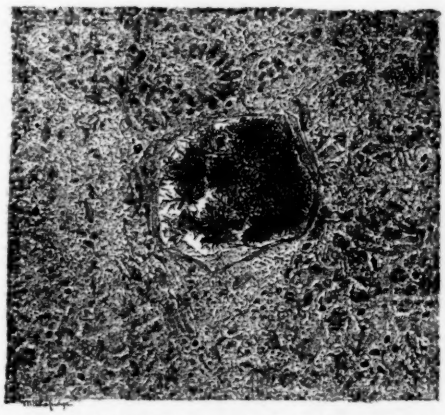
Hæmorrhagic infiltration of the septa, with commencing necrosis of epithelium. A small part can be seen of two lobules which are nearly healthy. × 175.

[8] Principles and Practice of Medicine, 1892.
[9] Handbuch der Pathologischen Anatomie, vol. i., p. 554.
[10] Loc. cit., p. 592.
[11] Loc. cit.

mation. The microscopical appearances, however, of this form of hæmorrhagic pancreatitis, as described by Fitz, are identical with those seen in the specimen here recorded, with the exception that in some of his cases there was rather more evidence of an inflammatory process, and colonies of bacteria had made their appearance. There is the same severe hæmorrhage and the same epithelial necrosis. Thus it seems reasonable to regard these cases, not as examples of primary inflammation of the pancreas, but as being a later stage of that condition of hæmorrhage into the organ which has been described above.

Finally, this fat necrosis is a very obscure condition. It was first clearly described by Balser,[12] and full references to the subject can be found in the monograph of Fitz already mentioned. It consists essentially in a crystallisation of the fat, and it occurs only in the fat which is in immediate relation with the peritoneum. The change is usually seen over the whole of the subperitoneal fat, including that of the omentum and mesentery, but it varies much in extent and degree. The omentum may be uniformly strewn with white grains which have considerable resemblance to tubercles; or similar grains and nodules may be aggregated into a thick patch on its surface as large as a crown-piece. The change may be almost limited to the region of the pancreas, or the whole peritoneal surface of the front abdominal wall may be studded with raised white tallowy nodules, and in some cases the appendices epiploicæ have become entirely converted into this material. Its origin is difficult to understand. In many

FIG. 2.



Part of a lobule completely necrosed, with the arrival of a few leucocytes from the periphery. In the centre lies a crystallised fat cell with a few clumps of small orange crystals. × 280.

cases it occurs in connexion with disease of the pancreas, and this association is far too common to be regarded as a mere coincidence. Dr. Rolleston recorded two such cases at the Pathological Society in October, 1892. It certainly occurs when the pancreas is in all respects healthy, and in most of these cases there is peritonitis from some cause, as in a specimen which I showed at the Pathological Society in November, 1892. Further, it may be found in cases of local peritonitis, and it is then accurately limited to that part of the peritoneum which is inflamed. It has also been seen during laparotomy for ovarian tumour. Its association with peritonitis, and especially its limitation to those parts of the peritoneum which are inflamed, may justify its being regarded as a change in the subjacent fat excited by the peritoneal inflammation. Where it is associated with disease of the pancreas, the occurrence of the change in the fat enclosed in that organ and in the fat immediately around it can be similarly understood as a local effect. In the specimen here recorded only those parts of the intra-pancreatic fat which lie in affected septa or lobules are necrosed; but the difficulty lies in understanding how disease of the pancreas can excite a change of this kind, which is disseminated over the whole fat of the abdomen, without any apparent inflammation of the peritoneum. At any rate, when it is found in the post-mortem room or on the operating table it is apparently of recent occurrence. The crystallised fat seems to act as a foreign body, and there is always a zone of round-celled infiltration investing the nodules. It is a condition which has some practical importance, for there is considerable probability that, if it is seen for the first time in the limited view afforded by an exploratory abdominal operation, it would be regarded as one of tuberculous or malignant deposit on the peritoneum.

Harley-street, W.

[12] Loc. cit.

---

ON THE

# OCCURRENCE OF AN ORGANISM RESEMBLING THE PLASMODIUM MALARIÆ IN A CASE OF MALIGNANT DISEASE OF THE BLADDER.

BY T. LAUDER BRUNTON, M.D., D.Sc. EDIN., LL.D. HON. ABERD., F.R.S.,

ASSISTANT PHYSICIAN AND LECTURER ON MATERIA MEDICA AND THERAPEUTICS AT ST. BARTHOLOMEW'S HOSPITAL.

A SHORT while ago when talking to my friend Dr. Ruffer he mentioned to me that he intended to examine the urine for organisms in cases of malignant disease, and I then told him what I had seen in the following case, which, as it may be of interest to others, I now record. Unfortunately no specimens of the organism were preserved and I have therefore thought it worth while to reprint the letters written at the time it was seen by two independent observers.

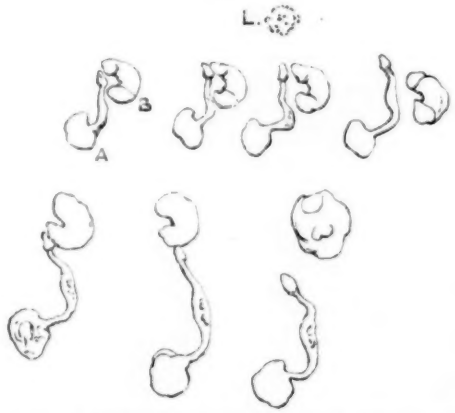
A man aged about sixty or sixty-five and of a very gouty diathesis began to suffer in August, 1892, from intense pain in voiding urine and great frequency of micturition. He consulted me on Dec. 6th, 1892, and perhaps I may best describe his condition by copying the report which I sent to his medical attendant: "I saw the patient on Dec. 6th. There was a curious whistling sound with inspiration in his larynx and trachea as if there was some slight obstruction in it, and a faint systolic murmur over his aorta, which I attributed to atheroma. There was some pain and tenderness over the region of the bladder and occasional pain and slight tenderness on pressure over the left kidney at the back. The specific gravity of the urine was 1020, acid and turbid. It contained a quantity of peculiar albumen. On boiling there was a thick cloud, which was not removed by acetic acid; on adding acetic acid to the unboiled urine and then boiling it there was hardly any turbidity, but there was a heavy cloud on adding picric acid; cold nitric acid gave a moderate cloud of a pink colour throughout. On microscopic examination I saw a very curious condition: there were numerous leucocytes in the field and several large cells, some of strangely distorted forms. From one large cell a prolongation exactly like a small serpent issued. (Fig. 1.) This serpent-like structure visibly grew whilst I was examining it, and shot its head out hither and thither from the cell exactly like a snake waving the upper part of its body backwards and forwards from its resting coils. For a while this snake, if I may so call it, applied its head to another cell as if it were sucking it, then moved its head away, and the whole organism shot rapidly across the field of the microscope. I could not see how this movement was effected; it looked to me like ciliary motion, for the snake kept quiet all the time. The behaviour of the thing was almost like that of an infusorium of the same shape and appearance. I put the patient upon sulphite of soda and tincture of belladonna, and asked him to come back in a few days and see me again. If I do not find him better I should strongly advise him to consult a surgeon, because I am not at all easy about the condition of his bladder; I should be much afraid of a new growth in it rather than of a stone. I am unable, however, to speak positively." On Dec. 16th I had a letter from his medical man, who suggested the possibility of the organisms that I observed having been contained in the bottle and not in the urine.

On Dec. 17th I saw the patient again, obtained fresh specimens of his urine and again found the organisms. On the 20th the patient consulted Mr. Hurry Fenwick, to whom I wrote as follows: "I enclose a short note that I wrote yesterday of the patient's case. My own impression was that it was a new growth in the bladder. I have given him sulphite of soda (fifteen grains) with ten minims of tincture of belladonna, but I shall be quite pleased for him to take the

mixture you suggest. Should it not relieve his pain I should be inclined to suggest the addition of some belladonna. I found some very curious bodies in the urine, looking almost like microscopic leeches or serpents, with one end attached to a large cell a good deal bigger than a leucocyte. One of them went quite across the field of the microscope as if by ciliary motion, but they were unlike any infusoria that I have ever seen." Mr. Hurry Fenwick replied on Dec. 21st as follows: "Many thanks for your letter. It forms a valuable addition to my notes. I remarked the long-tailed cells and looked upon them as being an indication of rapid carcinomatous growth. Some of the smaller nucleated cells were throwing out pseudopodia in the most active manner. I quite expect to find that the patient will develop cystitis in a few days, and this was one of my reasons for not sounding, for this inevitable complication would have been ascribed to the exploration rather than to the natural course of basal carcinoma."

I next saw the patient with Mr. Fenwick on Feb. 8th, 1893. On examination per rectum a hard mass was felt adhering to the right ischium, apparently about two inches and a half long by two inches broad. Nothing was felt in the rectum itself. On sounding, Mr. Fenwick felt that it was not a large encapsuled stone, but was certainly a tumour, and the diagnosis consequently was that it was malignant and the prognosis was very gloomy. The patient died on Feb. 27th, so that the progress of the case altogether was very rapid.

FIG. 1.

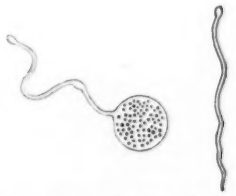



A and B are two cells. L is a leucocyte. The alterations in the snake-like organism issuing from B were so rapid that the successive drawings showing its apparent size and shape had to be done very hurriedly, and only in the fifth of them is the granular appearance of A shown, but it was present throughout and ought to have been drawn in the others if there had been time. It seemed better, instead of filling it in afterwards, to reproduce the drawings exactly as they were taken.

When I saw the case it did not occur to me that the moving organism observed in the urine was like the plasmodium malariæ, but on receiving a copy of Pepper's "Text-book on Medicine," containing an excellent plate of the plasmodium, the resemblance was at once very apparent. The objection that they might have come from the bottle was fortunately raised in time by the patient's medical attendant, so that I was able to ascertain that the organisms were really obtained from the urine and not from any admixture with water which might possibly have contained them. Cells throwing out pseudopodia and much resembling the organism I observed have been noticed by Michelson[1] in cases where there was a catarrhal condition of the bladder, but he does not mention whether the catarrh depended upon the presence of malignant disease in any of those cases or not. In 1880 Gaule[2] described an organism somewhat like a worm which could be observed on the blood-corpuscles of the frog lying close to the nucleus. It would then push one end of its body out of the corpuscle and wriggle itself out in a spiral manner. Sometimes it remained sticking perpendicularly out of the corpuscle, drawing itself back, and at last emerged free from the corpuscle. It then crawled briskly hither and thither, often dragging the blood-corpuscle, attached to it by invisible threads, after it as a horse does a waggon. It would draw near to another blood-corpuscle, bore into its interior, emerge from it again, push the corpuscle before it, turn it on one side, and then attack another. This worm, described by Gaule, is shorter than the

[1] Virchow's Archiv.
[2] Archiv für Physiologie, 1880, p. 18.

FIG. 2.



Plasmodium malariæ. (After Laveran.)

organism that I discovered, as it is only about half the length of the corpuscle of a frog, but it agrees with it in so far that there are certain round bodies inside the worm resembling little drops or vesicles. Gaule supposed it to be a normal part of the blood-corpuscle of the frog, and the serpent-like structure which I have described might possibly be only a long pseudopod. Gaule's worm was in all probability a foreign organism like the plasmodium malariæ and most probably the serpent-like structure is one also, but our knowledge of the relationship between it and the plasmodium or between the plasmodium and the organism whose occurrence in a case of cancer I have just described is as yet too scanty to allow of any general conclusions being drawn. The subject of the etiology of cancer is so interesting that I have thought it worth while to note the occurrence of such an appearance as the serpent-like body issuing from a cell without making further comments upon it.

FIG. 3.

Cells from urine, showing active amœboid movements. (After Michelson.)

Stratford-place, W.

## A CASE OF SYRINGOMYELIA.

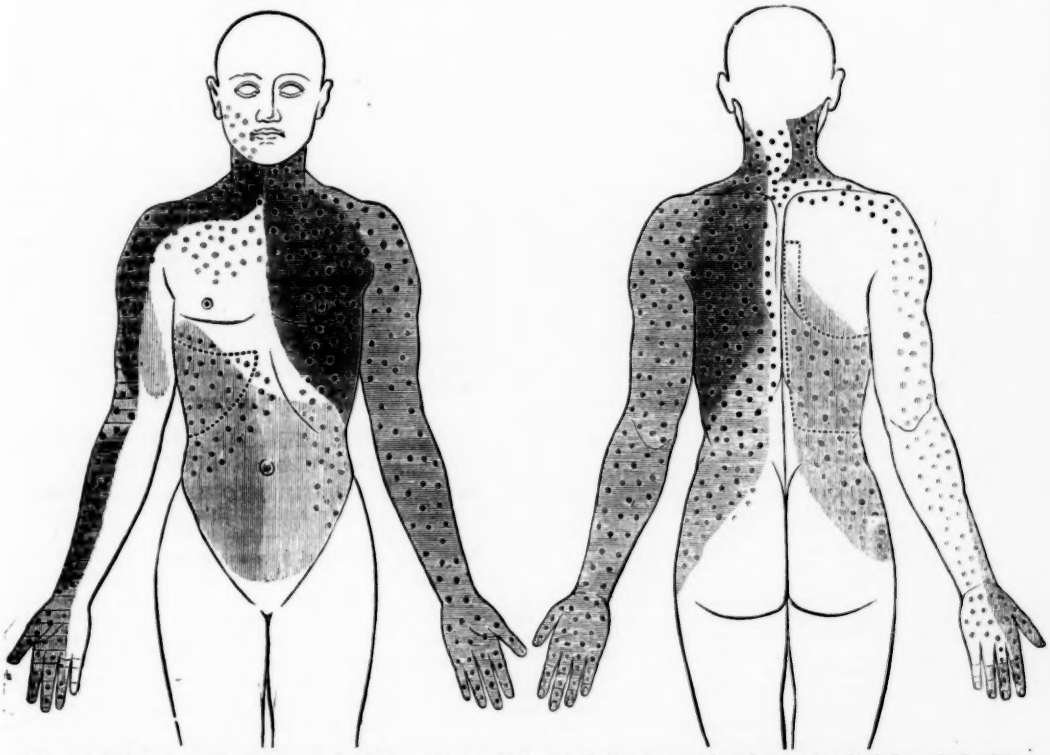
BY JAMES B. COLEMAN, M.B., M.CH. R.U.I.,
PHYSICIAN TO JERVIS-STREET HOSPITAL, DUBLIN;
AND
JOSEPH O'CARROLL, M.D. R.U.I., F.R.C.P. IREL.,
PHYSICIAN TO THE RICHMOND, WHITWORTH AND HARDWICKE HOSPITALS, DUBLIN.

A CASE lately under our care, and diagnosed as syringomyelia, presents an interesting group of nerve defects. The patient is thirty-six years old, has a good memory and a quick intellect; he has not had syphilis, has lived soberly, and comes of a healthy family. He says that as a child he was clumsy in gait, but up to January, 1880, he enjoyed good health. In that month when running across a field his right foot caught in a hole, his body became twisted and he "felt something give way." In the following November he began to suffer from pain and tenderness in the right lower costal area, which have persisted till the present time. In March, 1886, he was obliged to give up work as a clerk in London owing to swelling and loss of feeling in the right hand. After some rest this improved, but in March, 1888, he finally ceased to be able to write. The hand had become permanently swollen and he dropped

his pen or walking-stick unless he kept his eyes upon it. He subsequently earned his living in Philadelphia as a street labourer, a watchman and finally as a newsvendor, the changes in occupation being necessitated by the progressive clumsiness of his hands, the left having gradually become affected, though somewhat differently, from the right. In April, 1892, he came back to Ireland to die, as he had been told, of progressive muscular atrophy. At present he looks stout and ruddy. The right hand is swollen with a sort of solid œdema, cold and glossy; it is purple and thin-skinned on the back. The palm is concave, due apparently to contraction of the thickened skin, by which the thumb is adducted and the fingers more and more flexed towards the ulnar border. The power of grasping is very imperfect. When he attempts to extend the fingers they often become clonically contracted, and this can readily be evoked by passive extension. The right arm is weak and limited in its movements. The clavicular portion of the right trapezius is completely atrophied. The left hand is somewhat like a "main en griffe," its colour being usually an ashy red; it is cold, not swollen, except for a small patch of solid œdema on the back. The skin appears normal in texture. The power of the left hand is better than that of the right, but it is nevertheless poor. The left arm is subnormal in power and range of movement, but it is better than the right, although its bulk is distinctly less than that of the right. The right forearm, three inches below the elbow, has a girth of 25·5 c.m., whilst the left measures 23 c.m. or one inch less. As a result of the partial atrophy of the right trapezius that shoulder droops. Nowhere else have we been able, even by electrical tests, to discover any complete muscular atrophy. The eyes have been examined by Mr. Swanzy, who reports them in all respects functionally and organically healthy. The fields of vision, acuteness of vision, and ophthalmoscopic appearances are normal. The face is not quite symmetrical, the naso-labial fold being better marked on the left side than on the right. The right leg is spastic in movement, knee-jerk increased, ankle- and rectus clonus are present, and the limb is somewhat ataxic in fine movements. The knee-jerk is slightly increased in the left leg and there is a trace of ankle-clonus; there is no trouble of bladder or rectum. The sensory abnormalities are the striking ones in the case, but they lend themselves so readily to diagrammatic demonstration that they need not be described at length. (See Diagrams.) In the areas shaded with vertical lines a touch of a compass point is not felt till it has gone deep enough into the skin to cause pain (simple anæsthesia). In the areas shaded with horizontal lines a compass point is felt touching the skin, but pushing the point into the skin so as to draw blood causes only a sensation of increasing weight or pressure at the point. The areas over which dots are placed are insensitive to thermic changes—an area almost corresponding to the combined areas of anæsthesia and analgesia, but exceeding them in the right cheek. Electro-cutaneous sensibility is in abeyance practically in the same area. The sense of limb-position is absent in the right arm and good in the left. The conditions present here may be summed up as follows: There is complete atrophy in the right claviculo-occipitalis; diffused trophic changes are present in most of the structures of the right upper limb and to a much less degree in those of the left; spastic phenomena are well marked in the right leg, but slightly in the left; there is loss of tactile sensibility in a large area of the right upper limb and right side of the trunk, with loss of pain sensibility in a large and almost corresponding area on the left side; there is loss of temperature sense in combined areas of anæsthesia and analgesia and in a part of the right cheek as well; there is loss of all muscular sense in the right arm, and tenderness on pressure in the right inferior costal area.

There is a combination of motor, sensory and trophic lesions which, as it seems to us, can best be accounted for on the supposition implied in the word "syringomyelia." The

FRONT VIEW. BACK VIEW.



Vertical shading shows various degrees of simple anæsthesia. Horizontal shading shows various degrees of analgesia (exceedingly slight in right arm). Dots show various degrees of thermic insensibility. Right inferior costal area of hyperæsthesia bounded thus: .....

dissociation of sensory defects is well illustrated; the spastic gait is probably a merely secondary phenomenon, though the patient states that a practitioner in Philadelphia said he had amyotrophic lateral sclerosis. Most interesting is the question as to what determined the development of the central degeneration in the cord, though it would be too large for discussion here. The patient, except for the difficulty which he has in putting on his clothes and feeding himself, is in good general health and complete mental activity.

Westland-row, Dublin.

## SHORT NOTES OF A TEN-MONTHS' ILLNESS.

BY S. WILSON HOPE, L.R.C.P. LOND., M.R.C.S. ENG.

IN August, 1891, a man aged sixty, well built, of active habits, and whose only serious disturbances of health for twenty or thirty years (excepting an abscess near the ear, for which Dr. Urban Pritchard made an incision in the floor of the canal) had been occasional attacks of sleeplessness, with or without depression, besides an indescribable cough, which dated back to measles in childhood and was thought little of, sought advice for the following ills: swelling and pain in some of the joints of the fingers; pain over the region of the heart, which sometimes shifted over to the right chest-wall; shortness of breath and sleeplessness, along with some depression. He looked a little anxious and "out of sorts." His pulse was markedly compressible and intermittent. His tongue was clean. There was nothing to be noticed about the heart, except that it was acting weakly and irregularly, nor was there anything the matter with the urine, except that I think that his arthritic troubles would have been better had it shown a good pink sediment. Leaving these grosser organs for the brain, it was ascertained that he had been very anxious of late, on account of business worries. On the whole, then, the case came to be looked upon as a work-and-worry breakdown—a form of neurasthenia; he was given nervine tonics, sleep being obtained by drugs, and change was ordered at once, his gout, if gout it were, being ignored. He decided to go to Deal as soon as he could get away, for there he had once before obtained benefit when attacked by sleeplessness. He left on Sept. 20th, with instructions to take an opinion in town upon his case, and nothing more was heard of him till the receipt of the following letter from the physician he consulted: "Oct. 16th, 1891.—Mr. —— consulted me this morning. He is evidently much worse than when you last saw him before he went to Deal and has the aspect of a stricken man. He has lost flesh, colour and strength, and is so short of breath that he can scarcely walk 100 yards. The pulse is weak and frequent, and he has a cough, which, he says, is recent. It is difficult to explain his condition by what is found on examination. The abdominal organs appear to be fairly normal; the impulse and sounds of the heart are weak, but I find no definite disease. At the base of the right lung there is dulness from the angle of the scapula downwards posteriorly, extending round the lateral aspect of the chest at a lower level to the sternum. Air does not enter well over this area and on deep inspiration a few large crepitations can be heard, with obscure and distant tubular breathing. There is no exaggerated vocal resonance and vibration, such as would attend consolidation, and, on the other hand, the signs are not those of pleural effusion. I am disposed to think that here is the disease underlying the symptoms, but I cannot give a definite diagnosis of its nature. There is, however, much which is suggestive of malignant infiltration (sarcoma). I have seen no temperature records; the rigor was probably (?) pyrexial, its occurrence militates against the idea of malignancy, and I have had no opportunity of examining the urine, which might throw light on the case. There remains the question of the relation of the gout in the hands to the general condition; but for this, I should have recommended iron and quinine. On the chance that gout may have played an important part, it may be safe to give alkalies and tonics, and I enclose a prescription by way of suggestion. Iodine or a blister might be applied to the dull area.—Yours faithfully, ——." Again, on Oct. 8th, 1892, the same physician wrote: "I consider it imperatively necessary that Mr. —— should have at least three or four months of rest; possibly a longer period may be required. I hope there is not malignant disease, and there are several points which are not like cancer or sarcoma, among them the information you give as to the causation and mode of onset of the illness. The aspect, the aggravation of the symptoms, and increase of weakness when at the seaside, together with the irritable cough, were the facts which seemed to point to a serious interpretation of the physical signs. Yours, &c.——" This advice was steadily followed for some time, though Mr. —— could not be persuaded to apply for three or four months' leave of absence. No progress being made, he was given iron, arsenic and digitalis, and for a few weeks he gained weight, but in other ways remained about the same, though he was certainly stronger than when he returned from Deal. He could not use his hands well; wrote with difficulty, even with a specially constructed penholder; and never attempted to touch his violin. He moved about the house and walked out in suitable weather, the cough also being much better; but he made no progress; nor were matters improved by continued business anxiety. Patience gave way to despair. He determined to try a system pressed upon him by some friends, and originated by some lady whose name I forget. The chief points in this system, as set forth in a book on the cure of gout, were a flesh diet and copious draughts of water. My attendance ceased. In about ten days I was recalled and found that he had taken to his bed, with a temperature of 103°, frequent and distressing cough, and copious expectoration. He gave up all hope and day after day seemed to be slowly settling down. The feet and legs became swollen; breathing was difficult; the joints were painful; the tongue was glazed, and the pulse was very feeble. It was then deemed possible that all his troubles might be caused by some noxious element in the blood which none of the purifying organs could eliminate. If so, might not the inhalation of oxygen, by supplementing the crippled lung, aid very much in breaking this ingredient up into some more manageable molecules? Oxygen was given three times a day, and after a week or two the urine became loaded with lithates and colouring matter, and remained so for a great many days. Then improvement set in all round, and steadily, without any check, the patient recovered his health so far as to be able to get about and enjoy life once more, nor has anything worse than a broken leg befallen him since.

Petworth, Sussex.

## SOME REMARKS ON THE USE OF IODOFORM IN SURGERY.

BY R. H. ANGLIN WHITELOCKE, M.B., C.M. EDIN., F.R.C.S. ENG.

NOW that the use of iodoform in surgery bids fair to be discontinued in the practices of some surgeons—the complaints being in some cases directed against its objectionable odour, in others to the circumstance that doubts have been entertained as to its efficacy as an antiseptic substance—it was with no small measure of interest that I recently read an article in THE LANCET, entitled "One of the Best Applications of Iodoform in Surgery," from the pen of Mr. Arbuthnot Lane.[1] In his paper he brings forward its claims in a new light. His method of "stamping in" the purified powder into carious bone cavities as a dentist would fill a tooth is alike ingenious and novel and adds a more or less mechanical application to its more customary usages. Not only does he claim for his method the advantage of displacing the blood-clot, which would of necessity form and be a source of great danger in tuberculous cases, but also that of its being capable of entering into the formation of a restored osseous framework. That such does seem to be the case the citation of his cases, so eminently successful, goes far towards establishing. One of the reasons which urges me to write this paper is that the subject has been for some time of particular interest to myself. So long ago as the autumn of 1886, when I enjoyed the privilege of being house surgeon to Professor Macewen in Glasgow, I learned in a measure this use of iodoform. It was then the custom, and I know it was for some considerable time later, for that surgeon to fill up all the existing cavities in bones

[1] THE LANCET, July 15th, 1893.

which entered into the articulations excised for tuberculous disease with a powder consisting of one part of iodoform and four of naphthaline. The powder was, however, not "stamped in" but gently pressed in, the objects being in the first place to obviate the necessity for removing any more of the bone than was absolutely indicated lest the growing parts were endangered, as obviously might be the case in the knee-joint and, in the second, to take the place of the blood-clot which would afford a very suitable soil for the growth of the tubercle bacillus and, thirdly, to directly inhibit the growth of the bacillus. After the operation the wound was drained with a decalcified chicken-bone drainage-tube, and with a dry dressing, left as a rule for a month or six weeks before it was again examined. Presumably the iodoform remained where it was placed whenever the wound healed by primary union. Another advantage of the iodoform here is that it acts as a mild styptic and checks the oozing from the capillaries in the inflamed bone, a quality of much service when aiming at primary union in resections. From that time until the present I have used iodoform for these purposes, sometimes alone, at others mixed in varying proportions with either naphthaline or boracic acid powder. I have never had any cause to change this practice. A case may be mentioned here which bears out entirely Mr. Lane's experience.

A girl, aged fifteen, with a tuberculous history, three years ago came under my care. A suspected focus of caseation existed in her right os calcis. I accordingly separated the soft parts from the outer side of the bone and finding it softened gouged out almost the whole of its interior leaving but a shell of bone enveloped in its thickened periosteum. The cavity was carefully dried and packed more or less loosely with a mixture of iodoform and boracic acid (1 part in 2) and drawing the edges of the wound together I sealed it up. The result was excellent, the wound healed with a single dressing; and the patient can now walk satisfactorily on her heel. How much of the resulting solidity is due to the powder and how much (possibly all) is due to regeneration of bone from the inflamed periosteum is a matter of mere conjecture. I have also used the powder, with satisfactory results, for filling spaces in the soft tissues where tight bandaging was impracticable. That the principles of treatment involved in Mr. Lane's practice are scientific as well as practical I am convinced, and will be of the greatest service in a large number of cases. He has shown their adaptability to cases of erasion. I hope in again drawing attention to the subject and in showing how very useful iodoform can be in the treatment of excision as well as of the wounds of the soft parts, others may be the more readily induced to use it. In my experience it has proved more effectual in powder than in emulsion. It seems rather a fashion to decry its value without sufficient cause.

Oxford.

## THE ADMINISTRATION OF CHLOROFORM IN HYDERABAD.

BY M. G. NAIDU, M.B., C.M. EDIN.

THE first things which strike a visitor to the Afzulgunj Hospital, Hyderabad, are the extraordinary care and skill with which chloroform is administered by the students of that institution to a large and indiscriminate number of patients. The administration of chloroform in Hyderabad appears to have been reduced to a fine art, and every additional case is a step towards the perfection of that art. In every instance notes are kept of everything that occurs from the commencement of the administration to the end of the operation, and these notes form a clinical record which is probably without a parallel in any other hospital in the world. Skill and care alone, however, would be nothing very remarkable were these two most excellent qualities in a chloroformist not accompanied by a more than usual amount of confidence in the use of the drug. This is what attracts the visitor's attention next. Whence this confidence? Is it inborn? No, for many of the students at first hold the chloroform cap with trembling fingers. Is it the result of vast experience? No, for no student gets a chance of chloroforming the hospital patients for more than a month at a time. The origin of their confidence is rather to be found, in the first place, in the habit and as it were, the tradition of the school; and in the second place it is undoubtedly due to the immediate presence and personal teaching of Surgeon-Lieutenant-Colonel Lawrie, who holds himself, and not the students, responsible for everything which happens during an operation. Shortly after my arrival in Hyderabad I sought and obtained Dr. Lawrie's permission to chloroform some of his cases. He allowed me to do so continuously in ninety-one of his operations, and I desire now to have the honour of addressing a few remarks on the subject to the profession through the columns of THE LANCET.

I need not repeat here the principles affirmed and the methods recommended by the Hyderabad Commission. Anyone who wishes to give these principles a fair trial will find them set forth in Chapters 9 and 10 and on pp. 286-7 of the Report of the Commission. The gist of the Commission's contention is that if you keep the patient's respiration regular and normal during the inhalation of chloroform the anæsthesia will be normal and free from risk. At the Afzulgunj Hospital the heart and pulse are entirely ignored as regards the effect of the chloroform, and the aim of the chloroformist whilst producing complete anæsthesia is to see that there is never throughout the whole administration the smallest possibility of the patient inhaling an overdose. This seems to be a simple doctrine to understand and I need only mention therefore a few of the peculiarities or idiosyncrasies of respiration which I noticed whilst acting as chloroformist at the Afzulgunj Hospital, as they are apt to puzzle a beginner in his first attempts at chloroformisation according to Dr. Lawrie's system. My first difficulty was to get the patient to begin to take the chloroform without struggling or holding the breath. Under Dr. Lawrie's directions I soon overcame this difficulty by closing the cap on to the patient's face slowly and gently instead of suddenly, leaving the chin to be covered in last, thus letting the patient have plenty of air to start with and not choking him. Holding the breath at the very commencement of the administration appears to me to be of the nature of a strike on the part of the respiratory apparatus, partly prompted by the will and in part due to the sudden introduction of a pungent and foreign substance into the air passages and blood. Besides causing great distress to the patient, initial holding of the breath is a source of appreciable delay in getting him "under," for no chloroform enters the lungs and anæsthetisation is not going on as long as it lasts. Not unfrequently, on the other hand, the respiratory rhythm is very much quickened at the commencement of an administration and this is followed by a certain amount of apnœa. In either case the initial irregularity of the breathing often prefaces an irregularity of inhalation that continues more or less throughout the rest of the administration. Hence the importance of beginning the inhalation gently with quiet natural breathing. The inhalation once begun the cloth cap with the measured dose of chloroform on it (the chloroform being measured out at the rate of about a drachm a minute till the patient is "over") should be kept close and straight over the mouth and nose, and the respiration and nothing but the respiration should be attended to. Sometimes during the struggling of intoxication, which is the next epoch in the administration, the breathing becomes irregular. When this occurs with a small dose of chloroform on the cap it is not necessary to remove the cap unless the patient seems likely to gasp; but if a gasping inspiration is threatened, or if a fresh dose of chloroform has just been added and the breathing is irregular, it is a safe rule to remove the cap entirely and to give the patient a breath of air. If the breathing is irregular this does not, for a reason which will appear shortly, interfere with or delay the anæsthesia. Another and one of my greatest difficulties at first was to estimate with accuracy the precise moment when the patient was "under." Dr. Lawrie objects to the cap being kept on the face for even a second after the anæsthesia is complete, for the very palpable and sufficient reason that this is all the chloroformist has to produce and that anything beyond it is poisoning; and also that for a short time after the cap is removed the anæsthesia may deepen, doubtless from the continued absorption of the residual chloroform in the pulmonary vesicles. Dr. Lawrie, in common with other authorities, prescribes the abolition of the corneal reflex as the safest guide under ordinary circumstances to the establishment of complete anæsthesia, and entirely deprecates pushing the drug to the extent of producing stertorous breathing, unless this occurs incidentally at an early period. Whatever may be the state of the corneal reflex the cap is always removed at the Afzulgunj Hospital the instant stertorous breathing takes place. The cornea cannot altogether be trusted, in my opinion, as a guide to full

anæsthesia. I have seen the corneal reflex exist to a marked degree whilst there was complete analgesia all over the rest of the body; and, conversely, I have observed the cornea to be quite insensitive when the merest touch of the knife has caused the patient to struggle violently. The former state is more common in children, and as for the latter phenomenon several causes may contribute to it. In old people or in cases of chronic corneal disease, or from the constant friction of the examining finger of an inexperienced chloroformist, the sensibility of the cornea and its capacity to excite reflex action may be materially diminished. It is highly important therefore that the corneal nerves should not be worried into inaction whilst anæsthesia is progressing and that the corneal reflexes on both sides should be tested before the chloroformist announces the patient "over." With due regard to the precautions enjoined by the Hyderabad Commission, it is not possible to conceive how clinical results other than those quoted by the Hyderabad surgeon can be obtained. At all events, his system is worth a thorough and impartial trial at the hands of every anæsthetist who deserves the name. Not otherwise will statistics, however laboriously collected, be of any real value as clinical evidence against the Hyderabad method. Not a single surgical operation is performed at the Afzulgunj Hospital without chloroform unless the drug is contra-indicated by some abnormal or diseased state of the patient's respiratory organs; not an abscess is opened, not a hydrocele is tapped, but the patient is fully anæsthetised beforehand. If this is so in Hyderabad why should not the same condition of things obtain in London or in Edinburgh? Why should any patient anywhere suffer pain, however slight, if science can spare him that suffering? With the monthly statistics of the Afzulgunj Hospital before the profession no surgeon has a right to complain that chloroform takes up too much time or that its use is over costly. I am a beginner in the art of chloroformisation and yet the average time I took to produce full anæsthesia in my ninety-one cases was less than three minutes and the average amount of chloroform employed in each case was 2 7 drachms. Hyderabad and its illustrious ruler the Nizam will have some cause to complain if, beyond creating a momentary excitement in the lay and scientific mind and compelling a certain amount of transient admiration, their efforts at philanthropy do not ensure widespread results, and nowhere have Dr. Lawrie and his colleagues of the Hyderabad Commission a better right to expect their principles to be accepted and extended than in Edinburgh, where Simpson and Syme discovered and taught the unequalled advantages of chloroform as an anæsthetic.

Hyderabad, Deccan.

## A CASE OF
# SCARLET FEVER WITH RELAPSE; ACUTE RHEUMATISM AND PURPURA HÆMORRHAGICA; RECOVERY.

BY SIDNEY PHILLIPS, M.D., F.R.C.P. LOND.,
SENIOR PHYSICIAN TO THE LONDON FEVER HOSPITAL; PHYSICIAN TO OUT-PATIENTS AT ST. MARY'S HOSPITAL; PHYSICIAN TO THE LOCK HOSPITAL ETC.

A GIRL fourteen years of age was admitted into the London Fever Hospital under my care on Oct. 17th, 1892. Her temperature was 102°, she had a sore-throat of two days' and a scarlet fever rash of one day's duration. The attack was a mild one, the rash commencing to fade on the 18th, and the temperature reaching the normal on Oct. 21st. On the 28th, however, there was a recurrence of sore-throat and the temperature rose to 99·2°; the next day it reached 102·4°, and on the following day the scarlet fever rash again appeared on the chest. It was evident that the patient had a relapse. On the 31st the temperature was 104·2°, but fell again after the administration of three grains of acetanilid; the rash then began to fade, and by Nov. 2nd had almost disappeared, the temperature falling at that date to 99·2°, but on the following day it rose to 103·2°, and pains were felt in the joints. These pains increased, and on the 5th the rheumatism was worse, the joints of the fingers being very swollen and painful; the ankles and wrists and knees were also affected; there was much sweating, with pains in the back and legs; the temperature was 104·2°, the heart's apex was in the normal position and the heart sounds of fair intensity. Salicylate of sodium was ordered but made her sick and carbonate of potash was substituted. On Nov. 6th the temperature varied from 104 6° to 101 6°; there was considerable accentuation of the pulmonary second sound and a faint systolic murmur at the apex of the heart; some pleuritic crackles were heard to the left of the cardiac region. She was ordered quinine with an effervescing alkaline mixture. The patient remained in much the same state for the next three days, the temperature varying from 102° to 103 8° and the pulse rate from 100 to 112 per minute. On the 10th she became very drowsy and difficult to rouse, the tongue became dry with sordes on the lips, the heart sounds were very weak, and numerous petechiæ appeared on the lower limbs and chest. The temperature ranged from 100° to 100·6°; she was given six ounces of brandy in each twenty-four hours. On the 11th the joints were still swollen and she was as apathetic as before. In the evening very copious epistaxis occurred and I saw her at midnight. She was then blanched and lay sunk on the bed breathing rapidly; there was free bleeding from the gums and from the nose, and the urine, which had been normal till Nov. 10th, and then only showed a trace of blood, became claret-coloured with one-fourth albumen. The radial pulse could scarcely be felt and there were all the evidences of acute dilatation of the heart, the apex beat being just perceptible in the fifth intercostal space one inch outside the nipple, and the sounds "tic-tac." She could not sit up without faintness. She was at once cupped over the loins, the nose was plugged and she was ordered five minims of tincture of digitalis, with five minims of liquor strychniæ every four hours. On the following morning there was very great improvement and the urine, though bloody, only showed a trace of albumen. The heart's apex was now nearly in the normal position and its impulse and the radial pulse much stronger. During the next night she again bled freely from the nose, necessitating plugging, and there was again one-third of albumen in the urine. Epistaxis again occurred on the 13th and 14th and on the latter date crepitations were audible over the bases of both lungs, the temperature ranging from 100° to 102°. On the 15th, after a slight earache, about half a drachm of blood was discharged from the right ear, and on my visit to the hospital I found the membrana tympani perforated. The discharge from the ear soon became purulent and gradually lessened. After the 15th the joint symptoms began to subside and the temperature reached the normal on the 16th. After this date, too, there was but a trace of albumen in the urine and this gradually disappeared. The patient was now gaining strength, but the epistaxis recurred on the slightest movement or excitement, the last bleeding being on Nov. 23rd. Improvement after this was rapid; the mitral murmur entirely disappeared, the pulse rate was 80 a minute, the perforation of the ear drum healed and she left the hospital in January, 1893, quite well except for some anæmia.

*Remarks.*—After what was at first a mild attack of scarlet fever this patient suffered a week later from a severe relapse and subsequently from acute rheumatism of a more severe and enduring character than is usual in scarlet fever rheumatism. Probably there was a family tendency to rheumatism, her sister, who was in the same ward at the same time with scarlet fever, also developing articular rheumatism. After the rheumatism had lasted a week the purpura commenced with subcutaneous hæmorrhages, soon followed by bleeding from mucous surfaces. On Nov. 11th, after the profuse epistaxis, with gingivitis and hæmaturia, her condition became very critical and there was much danger of heart failure. Treatment was directed to relieving the engorgement of the kidneys by dry cupping and to stimulation of the heart's action by digitalis and strychnia, and the effect of the latter on the heart condition was most marked. Purpura after scarlet fever is not of very frequent occurrence, considering the frequency of rheumatism after scarlet fever. The purpura is very probably due in many cases, and in the present one, to the rheumatic as much as to the scarlatinal state; but as purpura follows other exanthems also it cannot be attributable to rheumatism in all cases. The hæmorrhage from the ear was unusual and showed the general tendency to sanious effusion. Patients as a rule recover from the purpura, but the danger will depend on the severity of the hæmorrhages and on the locality from which they occur. That cases may be fatal is illustrated by the interesting case recorded by Mr. G. E. Clemons in THE LANCET of Feb. 11th, 1893, and by a case recorded in THE LANCET in 1889 by Dr. Collie. Cases in which there is copious melæna and also albuminuria are difficult to control and are very fatal, but the record of this case may be of value if only as showing that no case, however severe, should be despaired of.

Upper Berkeley-street, W

# Clinical Notes:
## MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

### THE TREATMENT OF INFANTILE DIARRHŒA AND SO-CALLED ENGLISH CHOLERA.

BY S. W. WHEATON, M.D., M.R.C.P. LOND., D.P.H. ENG.,
PHYSICIAN TO THE ROYAL HOSPITAL FOR CHILDREN AND WOMEN, WATERLOO-ROAD.

SINCE infantile diarrhœa is unusually virulent in London and in other large towns, no less than 1126 deaths from diarrhœa having occurred in the thirty-three largest towns in England during the week ending July 22nd last, and since it has shown a tendency to affect adults in the form of "cholera nostras," a brief account of its treatment may not be out of place in the columns of THE LANCET at the present time. The disease is undoubtedly due to the development of a special short, rod-shaped bacillus in the intestines, and the poisoning of the individual by the absorption of the ptomaines produced by its growth in the intestines. The stools in severe cases consist almost entirely of the organism in question, mixed with a little mucus and a few putrefactive bacteria and amœboid bodies similar to those found in dysentery, and which are in all probability altered white corpuscles. The bacilli are absent from the blood and tissues of the body; the renal epithelium is found swollen and degenerated, the nutrition of the lungs suffers, so that broncho-pneumonia is almost always found post mortem. The last-named changes are probably the result of the accumulation of ptomaines in the blood and the rapid withdrawal of water from the tissues. Clinically the disease is seen in three forms:—(1) The mildest form is seen as a simple diarrhœa, with offensive pultaceous yellow stools containing a large quantity of mucus; (2) in the commonest form early vomiting is marked, with extreme and rapid depression, the stools being greyish-yellow in colour, thin and slimy and very offensive, having an odour like rotten cheese and composed almost entirely of bacilli; (3) the most intense form is characterised by thin watery grey-brown fetid stools, the brown colour being due to admixture with blood. The passage of membranous shreds, so common in Leicester, I have not observed in London. In all these forms that most powerful antiseptic the perchloride of mercury is the only drug to be relied upon. For the first two forms the best results will be found from subnitrate of bismuth, ten grains; liquor hydrargyri perchloridi, six minims; mucilage, one drachm; water, one drachm, to be given every two hours. For the form last mentioned accompanied by hæmorrhage, dilute sulphuric acid (ten minims), liquor hydrargyri perchloridi (six minims), and syrup (one drachm), to be given every two hours, will be found most effectual. The doses should be doubled in the case of adults. This treatment should be commenced at once in all cases; if any dose is vomited soon after its administration it should be repeated in a few minutes. Pure water should be supplied from the first to quench the extreme thirst, to keep up the action of the skin and kidneys and assist the elimination of the poison circulating in the blood. The patient should be at once wrapped in a blanket and hot-water bottles applied to keep the blood circulating on the surface as much as possible, and prevent the tendency to its accumulation in the internal organs. Absolute rest is essential from the first; the patient should not sit up, even for the purpose of vomiting. Alcohol is required from the beginning, and it is best given in the form of rectified spirit, of which two minims may be added to each dose of medicine for an infant. If one is unfortunately called to a case in which collapse and coma have set in, every means must be taken to restore the circulation by the application of external heat to the surface of the body, and the addition of water to the blood by injecting saline solution into the subcutaneous tissue of the body by means of an exploring syringe. The administration of water by the mouth cannot be relied upon, since vomiting is especially severe in this stage. Lastly, it must not be forgotten that the disease is very infectious; if a case is admitted into a children's hospital it almost always spreads in a virulent form and will attack adults, the dissemination probably taking place by the discharges drying upon linen and thus becoming volatilised into the atmosphere and contaminating all articles of food.

Clapham-common, S.W.

### CHLOROBROM IN SEA SICKNESS.

BY ARTHUR HUTCHESON, M.B., C.M. GLAS.,
LATE SURGEON S.S. "RIMUTAKA."

I USED chlorobrom in all cases of sea-sickness to which I was called whilst ship's surgeon to the s.s. *Rimutaka* during a voyage to and from New Zealand, and I now desire to state my experience as to its action. I always gave it in three-drachm doses in the second stage of this distressing ailment, when retching, headache, depression and sleeplessness were the prominent symptoms, the hour selected for administration being 10 P.M. in order to secure a good night's rest. The results were very satisfactory. The chlorobrom was always retained and was always followed by sleep (generally sound). The patients awoke much refreshed in the morning, with an appetite and able (except on one occasion) to eat and retain something light.

# A Mirror
OF
# HOSPITAL PRACTICE,
## BRITISH AND FOREIGN.

**Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum propriis collectas habere, et inter se comparare.**—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

### METROPOLITAN HOSPITAL.

#### A CASE OF ACUTE LOBAR PNEUMONIA, ASSOCIATED WITH ACUTE ŒDEMATOUS LARYNGITIS NECESSITATING TRACHEOTOMY.

(Under the care of Dr. G. THORNTON, Senior House Surgeon.)

IT is somewhat surprising that laryngitis is not met with more frequently in cases of acute inflammation of the lungs, but so far as can be ascertained it is a rare complication. In an analysis of 708 cases of acute pneumonia[1] treated in St. Thomas's Hospital during the period of eleven years from 1880 to 1890 inclusive laryngitis only occurred once and did not necessitate operation. It is also evident from examination of other tables that it is rarely met with. Dr. L. Dorange[2] has recorded a case following "a cold" in a vigorous soldier twenty-eight years of age, which resembles the following in many respects. Tracheotomy became necessary, pneumonia followed and after its subsidence and the almost complete restoration to health, a month after the tracheotomy, a second pneumonia took place, involving the same region as the first attack.

On Saturday, May 27th, Dr. Thornton was called to the surgery to see a woman, aged thirty-five, who was said to be suffering from difficulty in breathing. He found that she was in a state of extreme dyspnœa. Her friends stated that two days before, after having done a day's washing, she had complained of a sore-throat and a severe chill, and that next day she was very hoarse and had some difficulty in breathing, and that on Saturday morning she had become so much worse that they were alarmed and brought her to the hospital. As above stated, when Dr. Thornton saw the patient the dyspnœa was extreme and she was at once admitted. Laryngoscopic examination was found to be impossible, but a very much swollen epiglottis could be both seen and felt. The surgeon on duty was sent for; but the patient's condition becoming worse, tracheotomy was performed without further delay, immediate relief to the urgent symptoms being afforded. Before the operation the temperature was 101·8° F., and the same evening it rose to 105°; the respiration was hurried. The next day there was no distress in breathing, but the

[1] St. Thomas's Hospital Reports, 1889, p. 269.
[2] Sajous: Annual of the Universal Medical Sciences, vol. xiv., f. 5, 1893.

temperature remained high and the respiration quick, and the patient complained of some pain in the right side. On Monday (forty hours after the operation) she could breathe through the mouth fairly well, and the silver tracheotomy tube was replaced by a soft rubber one. On Tuesday the tracheotomy tube was dispensed with altogether. As the temperature continued to be high and the respiration quickened the chest was examined, and well marked physical signs of right basal pneumonia were found. On Wednesday (the fourth day after admission and the seventh day after the commencement of the illness) a crisis occurred and the patient made a speedy recovery. There was albumen in the urine for three days only.

*Remarks by* Dr. THORNTON.—In my limited experience laryngitis of any kind is not usually associated with cases of pneumonia and I have neither heard nor read of any case of œdematous laryngitis necessitating tracheotomy complicating such a condition. That the pneumonia here did not follow the tracheotomy, but was a primary condition, is shown by the onset of the illness, its duration and the evidence of extremely well marked physical signs sixty hours after the tracheotomy was performed, when the chest was examined for the first time.

## WOLVERHAMPTON AND STAFFORDSHIRE HOSPITAL.

### A CASE OF PURULENT PERICARDITIS; NECROPSY; REMARKS

(Under the care of Dr. MALET)

For the account of this case we are indebted to Dr. John Watson, House Physician.

This affection, if estimated by the number of cases on record in the medical journals, is not of very common occurrence in practice, and therefore the account of a case recently seen may be useful pathologically. As this is the second instance of the affection which Dr. Watson has seen he alludes to a few points which appear to be worth mentioning when contrasting the purulent with the ordinary serous form of effusion. In the first place cases of purulent pericarditis are admittedly difficult of certain diagnosis during life. There is not the history of rheumatism to guide the medical man and the disease commences and ends in an insidious manner, the diagnosis being unfortunately often only made in the post-mortem room Whether such effusions have any particular pathology of their own or whether they are the result of an ordinary pericarditis becoming purulent from some constitutional peculiarity on the part of the patient is, he considers, a matter of doubt, but it is certain that in both the cases which he has seen the illness was not brought about by rheumatism, tubercle or exposure to damp and wet. It would therefore seem that pericarditis may arise idiopathically, and that when it does so it shows a special tendency towards the purulent form. It appears to be met with more commonly in children than during later life, the subjects in both Dr. Watson's cases being under twelve years of age. The recorded cases also show a heavier incidence upon children than adults. An additional difficulty in regard to diagnosis arises from the fact that there is usually a complete absence of friction sounds over the area affected, owing no doubt to the nature of the effusion, which is much more viscid than is found in ordinary pericarditis. In neither of the cases observed by Dr. Watson was this physical sign present, and in most of those recorded the absence throughout the affection of pericardial friction is particularly emphasised.

A boy aged ten was admitted to the Wolverhampton and Staffordshire Hospital on June 17th last, the mother stating that the lad had been ill for a week, but had been attending school and playing about until the day before admission, when he had complained of nausea, a feeling of chilliness, aching in the legs and loss of appetite, but he had no other symptoms. On examining the chest nothing abnormal could be detected, except that the percussion note was slightly impaired at the right base posteriorly, but air entered the lungs freely in all parts. The heart sounds were, however, almost inaudible and could only be heard as a feeble flutter, no bruit was detected and the apex beat could not be felt. The pulse was 75; the temperature was 100° F. The urine was normal in all respects and the respiration was 20 per minute. He remained in the same condition for the next ten days, when his temperature rose to 103° F., and he complained of discomfort and slight pain over the præcordium, together with some dyspnœa. The area of cardiac dulness was at this time found to be increased and to extend both laterally towards the left axillary line and downwards towards the epigastrium, the heart sounds and impulse being quite imperceptible. There was a short, hacking cough present for the first time. There was great tenderness on palpating the abdomen (he could hardly bear percussion at all) in the hepatic and epigastric regions, which area was quite dull to percussion and presented a hard, solid feel, being continuous, moreover, with the enlarged area of cardiac dulness above, the one merging imperceptibly into the other. The free edge of the liver could be felt three inches below the free margin of the ribs and extended across the abdomen above the umbilicus. The chest was hyper-resonant all over except the portion before mentioned at the base of the right lung posteriorly and also the upper half of the left chest in front beneath the clavicle. On June 28th dyspnœa was intense, the child had an anxious, pinched expression on his face, the extremities and lips were cyanosed, the alæ nasi working violently, and he was only comfortable when he was in a sitting posture with his shoulders rounded and his arms and head supported on the tray crossing the foot of his cot. On this day some commencing œdema of the subcutaneous structures over the præcordium was observed which pitted on pressure, this continued and increased in severity up to the time of his death. Having seen a similar case some years previously which presented this sign, Dr. Watson was confirmed in his opinion that this was a case of purulent pericarditis when it appeared in the present instance in association with the other symptoms, which from the commencement were typical of pericarditis with effusion. He therefore aspirated the right chest from behind over the seat of the dulness before mentioned and withdrew ten ounces of clear, straw-coloured serum with a few flakes in it, giving great relief to the patient, who remained in much the same condition until July 1st, the fluid in the pleura reaccumulating slowly; but his condition was then so serious that he seemed as though he might die at any moment. His breathing was 48 to the minute, and he was gasping for breath. Some œdema of the lower limbs and genitals was also present, and there was also much œdema of the eyelids and face; his urine contained albumen. As the diagnosis of hepatic abscess had been made in the course of the illness, owing to the manner in which the liver was pushed downwards, it was thought justifiable to try to afford relief by introducing into the liver substance an exploring needle attached to an aspirator, in the hope of tapping a collection of pus. This was done by a member of the staff both from behind and also in front in several places, the needle being moved about when in the liver, but no pus flowed. The patient became progressively worse, the dyspnœa becoming most distressing. The œdema increased, the pulse became intermittent and feeble, and finally death occurred suddenly on July 5th whilst the boy was turning over in bed.

At the post-mortem examination, which was made twenty-four hours after death, the body was found to be very thin and emaciated, the subcutaneous fat being almost entirely absent on the chest walls. On opening the chest the pericardium bulged forwards into the aperture made and was seen to be immensely distended and thickened, and it was firmly adherent to the post-sternal connective tissue. On opening it about three pints of creamy, yellow, pus escaped. The heart itself was lying quite free and projected into the enormously enlarged pericardial cavity, its surface being covered with vegetations and lymph, as was also the inner aspect of the whole pericardium. The right lung was adherent to the outer surface of the pericardium in places and was partially collapsed. The left lung was pushed towards the back of the chest cavity and could not be seen at all on first opening the chest, the distended pericardial sac completely hiding it from view. The lung itself was quite collapsed and was almost airless. The liver was enlarged and congested, but the other organs were quite healthy in every respect.

*Remarks by* Dr. WATSON.—There are one or two points which may with advantage be mentioned in connexion with the above case. I have already referred to the absence of the pericardial friction sound throughout, but another symptom which was present in both cases of purulent pericarditis which I have seen was œdema of the præcordial cutaneous structures. I do not remember to have seen it in any case of ordinary serous inflammation of the pericardium, but only in the purulent variety of the disease. The facial œdema and

also that of the lower extremities and genitals are accounted for by the pressure exercised by the distended pericardium upon the large vessels in the thorax. The effusion into the pleura can be similarly explained, as well as the cyanosis and lividity of the extremities. The serum in the pleural cavity showed an immediate tendency to reaccumulate in spite of repeated tapping. The downward displacement of the liver is very misleading, as in this case it was thought by some that there was an accumulation of pus in that organ or between it and the diaphragm, and it was with this idea that exploring needles were introduced into the liver both from behind and in front. Other diagnoses which were proposed were pleural effusion, empyema, enlarged glands in the posterior mediastinum and a growth in the mediastinum. Lastly, the temperature was anything but a help in the matter of diagnosis. On admission it was 100° and remained below 101·6° until the sudden rise to 103° on the evening of June 27th. It varied between normal and 100° until July 2nd, when it became normal and remained so until death occurred.

## COUNTY LUNATIC ASYLUM, LANCASTER.

### A CASE OF ACROMEGALY.

MANY cases of this disease have been described since Dr. Marie first published an account of two patients under the care of Professor Charcot in 1886. It is, however, sufficiently rare to make the record of a case under careful observation of some interest, as thus we can compare it with others and note the absence or presence of symptoms regarded as important. It was supposed that certain pathological changes besides those of the skeleton and connective tissue were constantly found—viz., (1) simple hypertrophy of the pituitary body, with dilatation of the sella turcica; (2) the persistence of the thymus gland; and (3) the hypertrophy of the fibres and ganglia of the sympathetic system—but subsequent necropsies have proved that these changes are not invariably present. Dr. Fräntzel found no thymus gland and the pituitary gland was apparently normal. Dr. Waldo found cystic cavities in the brain, but the pituitary body was normal. Dr. Gauthier doubts the influence of changes in the pituitary body in the production of the disease. On the other hand, Dr. Marie regards changes in the pituitary body as important, and speaks of it as "almost invariably much enlarged." Dr. Holsti found it very much enlarged in a case described by him. For the account of this case we are indebted to Mr. S. Allan Shiach, the superintendent pathologist and assistant medical officer.

A married woman, thirty-six years of age, was admitted to the Lancaster County Lunatic Asylum on May 1st, 1891, when she was found to be an unsightly looking woman, with a low forehead, coarse hair, very large nose and large hands and feet. Her speech was slow and her general health was good. She had had four children, of whom one is alive. She had been of intemperate habits and had suffered from severe headaches for six months previously to admission. There was no history of specific disease. As regarded her mental condition, she was subject to melancholia with delusions.

In June last the forehead was slightly retreating and contracted, the anterior parts of the temporal bones being depressed. With the exception of some thickening about the middle of the sagittal suture there were no crests to be found in the lines of the cranial sutures. The external occipital protuberance with its ridges and the mastoid processes were not affected. There was a projection round both orbits due to a thickening of the superciliary ridges, the skin over which was also thickened. The eyelids were slightly longer but not thicker than normal. The whole face was elongated and was of an oval shape; the nose was greatly increased in size and formed a marked projection; the septum and alæ nasi were thickened to more than twice their normal size; the malar bones were hypertrophied; both lips were hypertrophied, the lower one being everted; the lower jaw was markedly prognathous in type and when the two jaws were closed it was in front of the upper one; the angle of the lower jaw was an extremely oblique one; the tongue was enlarged and flabby; there were only a few teeth in the upper jaw and many of those in the lower jaw were carious; the uvula was increased in size; there was no departure from the normal in the curvatures of the spine; the sternum was thickened and so were the ribs, but to a slight extent only; the clavicles were increased in size, especially at their sternal extremities; there was no change in the scapula or its processes, in the vertebræ or in the pelvic bones; both hands were markedly acromegalic in type and the term "spade-like" could be well used in describing them; the fingers were short and stumpy and the proximal and distal phanlanges were equally hypertrophied. The thenar and hypothenar eminences were increased in thickness. The nails were longitudinally striated. The bones of the forearm and arm were not enlarged. The feet were affected similarly to the hands, but not to such a marked degree. The lower ends of the tibia and fibula were thickened. The larynx was slightly thickened and the thyroid cartilage was more prominent than normal, but the thyroid body did not appear to be affected. In the upper sternal region the dulness due to the remains of the thymus gland and mentioned by Schültze and Verstraeten, was looked for but without result. The area of heart dulness was increased, but there was no bruit present. The arteries and veins were healthy. Perspiration was a marked feature in this case and it appeared with the slightest exertion; it was very profuse in amount and it had a most disagreeable odour. There was no albumen, sugar or peptones present in the urine. The susceptibility to cold was increased and the circulation in the extremities was very poor. Severe pain was very frequently felt in the head, occurring during both the day and the night. The pain was referred to the vertex of the cranium, about the middle of the sagittal suture. No pains were felt in the joints or the limbs. Menstruation had not taken place for a year, and for six years before that it had been very irregular. None of the special senses seemed to be affected. The appetite was good, and when headache was present a full meal often succeeded in driving it away or in alleviating the pain. Her wedding ring had required alteration twice owing to the increase in the size of her finger, but for the last year there had been hardly any change. The voice was harsh and grating.

*Remarks.*—The objective phenomena in this case are very noticeable and seem to indicate unmistakably that the diagnosis of acromegaly is a correct one. The symmetrical enlargement of the hands and feet, the prognathism of the lower jaw and the hypertrophy of the lips &c. are present. Pierre Marie, who first described this disease and who named it, says that curvatures of the spine in the cervico-dorsal region and disturbances of vision are nearly always seen in cases of acromegaly. The patient in the present case does not present these symptoms, but may probably do so on further development.

# Reviews and Notices of Books.

*Outlines of the Diseases of Women.* By JOHN PHILLIPS, M.A., M.D., Assistant Obstetric Physician to King's College Hospital. With 120 Illustrations. London: Charles Griffin and Co., Limited. 1893.

IN preparing a text-book intended, as this is, "entirely for the use of the student and junior practitionor," it is essential that the author should do as he has done, and begin at the very beginning with the most elementary part of the subject; for, as he says, no scientific knowledge of it "can be attained without a close attention to first principles." A book based on these lines, on such a subject as gynæcology, must necessarily contain much that has been previously ascertained by a multitude of workers in various parts of the field, and an author's opportunity of displaying originality is therefore considerably restricted. He can, however, show a sound judgment in selecting what seems to him best from standard works on the subject and he can incorporate with this any comments or original observations, as occasion may arise, that are suggested by his own experience. In the preface Dr. Phillips very rightly insists on the importance of an accurate acquaintance with the female pelvic organs for the proper study of the diseases of women. The student must have a clear understanding as to what is normal before he can profitably study what is pathological. As regards Fig. 1, an outline drawing of the female pudendum, we think it would be almost unintelligible to a beginner. For instance, a continuous line, that might equally represent the outline of a helmet or a bell, is intended

to represent the nymphæ; and again—although on the adjoining page the hymen is correctly described as being "usually crescentic in shape, with its concavity forwards"—in this figure it is represented as having an abruptly horizontal but slightly waved anterior margin, the crescentic character being altogether ignored. We consider the wiser plan would have been to avoid any attempt at originality on such familiar ground, and boldly copy—of course with proper acknowledgment—one of the many accurate figures available: for instance, that in the late Dr. Matthews Duncan's "Papers on the Female Perineum." An even more important point for the student is a correct knowledge of the normal position of the uterus in relation to the adjoining parts, and here again we find a discrepancy between the description in the text and the relation shown in the figures. Thus on page 23 it is stated that "the uterus lies with its anterior surface touching the bladder, no intestines lying in the utero-vesical space," but on p. 19 are two figures, one copied from Ranney and the other a drawing by the author, in both of which, though the bladder is empty, the uterus is figured as separated from it by a wide interval. The first direction given for passing the finger into the vagina is as follows: "The oiled finger should impinge upon the lower surface of the symphysis pubis and gradually glide backwards over the clitoris and urethral orifice past the hymen, or the site of that body, into the vaginal cavity." This is surely a bad rule. It is true the author goes on to say: "Another method, which seems preferable, consists in starting from the anterior edge of the perineum, passing the finger forwards, and so into the vagina." This is the right way, for many reasons; and it is to be regretted that Dr. Phillips should have mentioned the other as if it were very much a matter of choice. Carunculæ myrtiformes are certainly not usually produced by repeated coitus in a nullipara, nor is the appearance of *white* lines on the abdomen a physical sign of pregnancy. It is stated that mucous tubercles are "probably capable of producing primary syphilis in the male." We certainly thought that there was no doubt whatever about it, and if the author has grounds for doubt they should be given. Fig. 41 is a figure of the "author's pattern" of a solid steel dilator for dilating the cervix, and Fig. 101 represents an expanding volsella; in neither case does the instrument figured appear to us to differ materially from instruments with which gynæcologists have been long familiar.

---

*Les Fermentations.* Par ÉMILE BOURQUELOT, Docteur ès-Sciences, Professeur agrégé à l'École supérieure de Pharmacie de Paris, Pharmacien en chef de l'Hôpital Laennec. Encyclopédie des Connaissances pratiques. Paris: Société d'Éditions Scientifiques. 1893.

IN view of the present demand for a description of the processes of fermentation the appearance of a capital *résumé* of what has already been done should be hailed with pleasure by those who, though greatly interested, have not the time to keep abreast of the enormous mass of literature that has accumulated during the last ten or fifteen years. Schutzenberger's excellent manual, which appeared in the International Scientific Series, has been long, and will still remain, the text-book for those who wish to master the subject thoroughly from the popular scientific standpoint; but M. Bourquelot's work on Fermentation will nevertheless be welcomed by those who wish to gain an insight into the principles of fermentation in as pleasant a manner and in as short a time as possible; also by those who wish to see what steps have been taken during the interval between the publication of Schutzenberger's work and the present day. It seems as though the facile pen of the Frenchman gives him an advantage in the popular exposition of scientific work; for in comparatively few pages and in a condensed but bright form we have what most English writers could only convey to the reader in a bulky volume. Organised ferments and non-organised ferments, the various methods of fermentation, the processes by which they are brought about and the resulting products are all briefly and clearly expressed; but in spite of the smallness of the bulk the feeling with which the reader rises from a perusal of the book is that however much he would have liked to have had a fuller exposition, so far as it goes there is nothing wanting to make clear what the author wishes to teach.

---

*Compendium der Physiologie des Menschen für Studirende und Aerzte.* Von Dr. Med. R. PESTREICH. (A Compendium of Human Physiology for Students and Practitioners.) By Dr. R. PESTREICH. Berlin: S. Karger. 1891.

THIS book is intended to present students and practitioners, in as compressed a form as possible, with the principles of human physiology. To compress so vast a subject as present-day human physiology into the compass of a small and portable volume can only be the result of a well-digested knowledge of the subject, and of good judgment and a power of seizing the salient points of an ever-growing science. The author's method has evidently been not to lose himself in the verbiage of speculation, but to relate as shortly as possible whatever in human physiology may be regarded as proximately determined. Both to beginners wishing to study the skeleton of the subject and to those of more extensive knowledge desiring to refresh their memory of facts this little book should prove useful.

---

## LIBRARY TABLE.

*Geburtshülfliches Vade-mecum.* Von Dr. A. DÜHRSSEN. Vierte verbesserte und vermehrte Auflage. Berlin: S. Karger. 1892. (*Obstetric Vade-mecum.* By Dr. A. DÜHRSSEN. Fourth Improved and Enlarged Edition.)—The author of this book is a *privat docent* of the University of Berlin and First Assistant in the Obstetric Clinic at the Charité Hospital in that city. These qualifications imply extensive opportunities for the study of the subject upon which he writes. The fact of his work having reached a fourth edition is sufficient evidence of its having been appreciated by students and practitioners alike. Whilst making sufficient reference to the physiology and pathology of the subject the author treats at greater length the practical emergencies which arise in obstetric practice. He very properly emphasises the incalculable importance of a thorough knowledge of the theory and practice of antiseptics in this sphere and refers to a fact which has also been noticed in this country—namely, that while the mortality of childbed has been reduced to a minimum in institutions under the care of thoroughly educated physicians and nurses, there has been no commensurate diminution of the death-rate in childbed generally. This in the case of a process usually so normal as parturition can only be due to defective antisepticism. In treating of the important subject of post-partum hæmorrhage the author advocates as a *dernier ressort* the plugging of the uterine cavity and vagina with iodoform gauze, which appears to act directly by obstructing the extravasation of blood and indirectly by provoking contraction of the uterus. While he has given in small compass a good *résumé* of his subject, his work cannot be regarded as a mere compilation, but contains valuable information gleaned from personal experience.

*Guide de Diagnostic Gynécologique à l'Usage des Praticiens.* Par le Dr. BERLIN (de Nice); avec une Préface par le Dr. AUVARD, Accoucheur des Hôpitaux de Paris. Paris: Société d'Éditions Scientifiques. 1893.—The author has aimed at producing not an exhaustive treatise on the Diseases of Women, but an outline of the methods to be adopted in order to arrive at a diagnosis in a gynæcological case. The result is a handy little volume of some 200 pages, clearly

printed and with the subject matter methodically arranged. The plan of the work approaches that of an analysis or table. Part I. deals with the preliminary interrogation of the patient, Part II. with the physical examination, and Part III. with disturbances of the general health in relation to gynæcology. There is comparatively little difference between the principles and methods here recommended and those that are to be found in our own standard text-books. We are not quite sure, however, whether the engraving of an examining room, fitted apparently with every conceivable appliance, is intended to represent the kind of consulting-room in general use among French gynæcologists. If so, the national courage is obviously not the exclusive property of the male sex. Such a veritable chamber of horrors would be calculated to strike terror into the stoutest heart.

*Arzneiverordnungen in der Kinderpraxis.* Von Dr. Med. H. GUTTMANN. Zweite unveränderte Auflage. Berlin: S. Karger. 1893. (The Prescription of Medicines for Children. By Dr. GUTTMANN. Second unchanged Edition.)—The time-honoured rule of thumb which regards the age of a young patient as a fraction of adult life and divides the dose of an intended remedy by that fraction has, on the whole, its use. It has the merit also of comparative safety. We know there are remedies, however, such has mercury and belladonna, for which children have a greater tolerance than their age regarded as a fraction of that of an adult would *a priori* indicate. The apportionment of dose to condition met with in child life, as also the formation of judgment as to the utility of any given drug, requires considerable experience. It is sound practice, however, to remember that men are but children of a larger growth and that the examination and treatment of disease in children must run on the same lines as those applicable to adults. The main acquirement of the physician who has had much experience of infantile practice is an increased power in the interpretation of clinical signs. The little book before us has been compiled by one who has had a long experience in practice and it contains much useful information. It is amusing to find at the end of each drug, described pharmacologically and therapeutically, the price of the article, presumably for the guidance of the public. The fact that within two months the book has reached a second edition is evidence of its having been appreciated in Germany.

*On the Application of Suitable Mechanism to a case of Amputation of Both Hands.* By F. G. ERNST.—This pamphlet gives an illustrated description of the apparatus made by the author, a well-known mechanician, to replace as far as possible the lost members in a case where double amputation of forearm had been performed in consequence of the blowing off of the hands by the explosion of a gun. The object sought to be obtained was to render the patient practically independent of external aid, so that he might do for himself all those offices for the performance of which such patients are obliged to rely on others. The illustrations show the various apparatus devised with much skill and ingenuity, enabling the man to write, cut and eat his food, button his clothes, and perform his toilet. The difficulties to be overcome were many and will suggest themselves to the practical surgeon. Mr. Ernst is to be congratulated on the result of his thoughtful work and the patient on the help afforded him.

*Archives de Physiologie.* No. 3; Juillet, 1893. Directeur, M. BROWN-SÉQUARD. Paris: Masson.—This part contains many essays. The more important are: A Contribution to the Study of Fatigue, by M. J. E. Abelous, who points out that muscular fatigue may be the result of two factors—exhaustion and toxifaction—and that the latter is the more potent of the two. Under long-continued nervo-muscular action the organism forms toxic agents which, after a certain time, cause a true curarisation of an animal. When fatigue is pushed to its extreme the excitability of the muscles themselves is seriously impaired. MM. Maurice Arthus and Adolphe Huber contribute an essay on the Solutions of Fibrine amongst the Products of Gastric and Pancreatic Secretion. MM. Marinesco and Paul Sérieux give an account of a case of a Lesion implicating the Fifth and Seventh Nerves, with Consecutive Trophic Troubles; M. Gley gives the results of Thyroidectomy in the Rabbit; M. E. Meyer demonstrates that Cardio-vascular Inhibition can be exercised in the newly born animal; M. P. Langlois describes the Effects of Destruction of the Supra-renal Capsules in the Dog; M. H. Roger writes on the Poisonous Qualities of the Soluble Products of the Bacillus Coli Communis; MM. Phisalix and Bertrand on the Poisonous Quality of the Blood of the Toad; M. J. P. Morat on the Question of the Existence of Frigorific Nerves; M. Aug. Charpentier on Unipolar Faradisation as a Means of Physiological Excitation; and there is a long article by MM. Brown-Séquard and D'Arsonval on the Physiological and Therapeutical Influence of the Orchitic Fluid on the Animal Organism, in which the authors adduce many cases of locomotor ataxy in which it has proved of service.

*Klinisches Recept-Taschenbuch für Studirende und Aertze.* Von Dr. MED. FRIEDRICH VAN ACKEREN. (Clinical Prescribing Pocket-book for Students and Practitioners. By Dr. FRIEDRICH VAN ACKEREN.) Berlin: S. Karger. 1891.—This is a very portable pharmacopœia and prescriber's companion, which contains much useful information, not only for the German student and practitioner for whom it is intended, but also for those of other nationalities who in their reading or practice have to peruse German prescriptions. In addition to the pharmacological information pertaining to drugs this little book contains useful hints on diet in various diseased conditions and a synopsis of the more important baths and health resorts, with some information concerning the constitution of their respective springs. Like similar German works it also contains a statement of the German apothecaries' legitimate charges.

## JOURNALS AND REVIEWS.

*The Journal of Anatomy and Physiology.* Conducted by Sir GEORGE HUMPHRY, Sir WM. TURNER and Dr. M'KENDRICK. Vol. XXVII., Part IV. July, 1893. London: Charles Griffin and Co.—The chief articles contained in this part are—(1) Robert H. Woods: Law of Transverse Vibrations of Strings applied to the Human Larynx; (2) Bertram Windle: Certain Early Malformations of the Embryo; (3) Arthur Meigs: Cystic Degeneration of the Heart, Spleen, Liver and Kidneys; (4) Gordon Sanders: Case of Congenital Malformation of the Heart; (5) Joseph Griffiths: Structural Changes observed in the Testicles of Aged Persons, and a second article by the same author on the Changes of the Testis of the Dog when it is replaced within the Abdominal Cavity; (6) F. Shepherd: Symmetrical Depressions on the External Surface of the Parietal Bones; (7) F. Parsons: Morphology of the Musculus Sternalis; (8) E. Carlier: Contributions to the Histology of the Hedgehog; (9) A. MacAlister: The Development and Variations of the Atlas; and (10) G. B. Howse: The Development of the Mammalian Pelvis &c.

*The Journal of Mental Science.* July, 1893. London: J. & A. Churchill.—The latest number of this journal contains several papers of interest. The first one, by Dr. Ellis, on "The Amok of the Malays," we have already referred to in an annotation in a former number as an interesting contribution on a curious psychical state.[1] Amongst other papers we may mention that by Dr. Wiglesworth on General Paralysis occurring about the time of Puberty, and a continuation by Dr. George M. Robertson of his paper on the Formation of

[1] THE LANCET, July 15th, 1893.

Subdural Membranes (pachymeningitis hæmorrhagica.) It is curious to find in a number which for the first time introduces a column for the use of asylum chaplains a skit on "The Good Asylum Chaplain," which scarcely seems calculated to foster cordial relations between the medical and clerical elements in asylum administration. The reviews are numerous and the retrospects interesting and full.

*Year-book of the Scientific and Learned Societies.* London: Charles Griffin and Co. 1893.—The tenth issue of this useful reference-book, which has now become almost indispensable to the work carried on by scientific and learned societies as well as to the labours of individuals engaged in literary pursuits in general, should have received notice at our hands at an earlier date. The present volume gives the usual list of societies of the class indicated as well as of those associations which have been more recently organised. A record is also given of the papers read during the past year at the meetings of the respective societies. So far as our investigation has gone the information afforded in the book is accurate and, for the purpose in view, complete.

*The Liverpool Medico-Chirurgical Journal.* No. 26, July, 1893. Liverpool: Medical Institution. London: H. K. Lewis.—This is an interesting number of an excellent publication which embodies in its pages the transactions of the Liverpool Medical Institution, together with many original papers and reviews of current literature. From his wide experience of the treatment of epilepsy Mr. W. Alexander offers many valuable suggestions on the care and management of epileptics. He deprecates the long-continued administration of bromides and speaks strongly in favour of borax as an internal remedy, but he does not conceal the drawbacks incidental to it, one of the most singular being the total depilation of hair that it may cause. Dr. Alex. Campbell from his work at the Prague Pathological Institute has found that in alcoholic paralysis there may be definite lesions of the spinal cord as well as of the peripheral nerves. Dr. E. W. Hope, assistant medical officer of health, gives a short account of the recent outbreaks of small-pox in Liverpool showing how the measures adopted have aided in discovering many cases. Mr. Seymour Haden writes forcibly against cremation and in favour of what he believes to be a more rational method of disposal of the dead. Dr. Caton contributes some notes on Acromegaly, relating a case in which there was a large tumour of the pituitary body. Mr. Mitchell Banks writes on the Surgery of the Gall Bladder, and Dr. Barr gives details of a case of typhoid fever complicated with pneumonia and empyema.

*The Medical Magazine.* Vol. II., No. 2, August, 1893. London: Southwood, Smith and Company.—The first articles consist of a friendly criticism of the British Medical Association, with suggestions for its greater usefulness to the profession and the better organisation of its meetings. Dr. Lorrain Smith, in an article on the Thyroid Treatment of Myxœdema, avers that the thyroid body may now claim a place amongst the glandular organs, the secretion of which is concerned with metabolism. Mr. F. W. Clark urges that measles should be brought under the provisions of the Notification Act. Dr. Legge describes the sanitation of Brussels and points especially to the thoroughness with which meat inspection is enforced.

*The Birmingham Medical Review.* August, 1893. London: J. & A. Churchill; Birmingham: Hall and English.—Dr. Edwin Rickards thinks that the prophylactic treatment of infectious diseases by means of "vaccines" is the goal to be aimed at and in an address here published he reviews the progress that has been so far made in this direction. Amongst the Clinical Cases recorded is one in which the inhalation of ether produced alarming cardiac and respiratory depression. The "Periscope" is devoted to a record of recent literature in genito-urinary surgery, contributed by Mr. G. Barling.

*The International Medical Magazine.* July, 1893. Philadelphia: J. B. Lippincott.—Some valuable pathological facts are furnished by Dr. Walter Carr in the course of an article embodying the results of post-mortem examinations in cases of tuberculous disease in children. The starting points of general infection are considered and the frequency of primary infection of lymphatic glands is insisted on. The condition of Plica Polonica is treated by Dr. Ohmann-Dumeshil, a case of this curious affection being described and figured. The writer inclines to the belief that it is mainly an atrophic state of the hair induced by nerve influence. Dr. Reves Jackson sums up the arguments for and against the use of electricity in gynæcology, concluding that it is of distinct benefit, but not to the extent often claimed for it by its advocates.

*The Practitioner.* August, 1893. London: Macmillan and Co.—Dr. G. Oliver concludes his exhaustive studies on Pulse Pressure. Professor Chiene gives some useful hints for "first aid" in his paper on the Treatment of Fractures by Simple Methods. Dr. James Brunton points out the advantages of Sorrento as a health resort, the climate being very mild and dry and malaria being unknown. Dr. Mansel Sympson describes the value of salol as an intestinal antiseptic in duodenal indigestion, summer diarrhœa and typhoid fever.

*The American Journal of the Medical Sciences.* August, 1893. Philadelphia: Lea Brothers and Co.—The two chief articles in this number are contributed by Drs. J. J. Putnam and G. Dock. The former writes of myxœdema and thyroid feeding and enters into lengthy discussion of the points in favour of a clinical relationship between myxœdema and Graves' disease and acromegaly. Dr. Dock gives a detailed account of the rare condition known as chloroma. His contention is that the affection is closely allied to leukæmia, and his paper is of especial value from the survey given of the latter disease. Some anatomical notes on the appendix vermiformis are contributed by Dr. Hewson, demonstrator of anatomy at Jeffersen Medical College.

*University Medical Magazine.* August, 1893. University of Pennsylvania Press.—Dr. James Young describes two cases of hip disease which were treated with entire restoration of mobility. They were treated by traction and counter-irritation and the general health was maintained by tonics and hygiene. Dr. Dorland and Dr. C. S. Potts advocate the administration of large doses of quinine in chorea, especially in the acuter forms of the disease. In the editorial columns attention is drawn to the "four years' graded course of medical instruction" to be commenced at the University of Pennsylvania shortly; but in this country it has been proved that four years is inadequate.

---

CLAYTON HOSPITAL, WAKEFIELD.—The annual meeting of the subscribers to this hospital was held on the 26th ult. in the board room. The occasion was taken advantage of by presenting one of the honorary surgeons, Mr. Thomas Walker, M.R.C.S., with a portrait of himself in oils, together with a silver tea-kettle, in acknowledgment of the value of the professional services he had rendered to the institution during the thirty-six years he had held office. After the presentation the statement of accounts was read, by which it appeared that the affairs of the institution were in a prosperous condition, since the income for the preceding year had been £2985 odd, showing an increase of £109 on that of 1891.

NEW ASYLUM AT LARBERT.—This building, which was formally opened on the 26th ult., has been erected by the Stirling District Asylum Board at Larbert at a total cost of £20,000 and is intended for the treatment of cases of acute insanity. It has accommodation for 120 patients and comprises a central block and two side wings, with connecting corridors for male and female patients. Each wing in turn is subdivided into two divisions—one for acute cases of insanity and one for feeble and sick cases.

# New Inventions.

## THE "CORE" BED-REST.

THIS bed-rest, invented by Mrs. M. A. Core, is stated to be specially adapted for convalescing invalids or for acute cases of heart disease and dropsy. The back is curved (see engraving) and the pillows rest in lengthwise; two are sufficient and a third across the top affords a support for the head. The lower curved band fixes the back, leaving the lower part of the spine to rest solely on the pillows. The rest

can be arranged at any angle, so that a patient may sit upright, or even lie in a recumbent position. There are brass buttons at the back, so that in the case of a long and tedious illness pillows can be more firmly secured by means of pieces of strong tape in which button-holes have been made; the pillows can be shaken without uncomfortably disturbing the patient. Messrs. Arnold and Sons of West Smithfield are the makers.

## NASAL PROBE AND COTTON-HOLDER.

THE probe (Figs. 1 and 2) here figured is in part a modification of that of Bosworth in its flat end, which, however, is serrated to within a short distance of its extremity. The other end terminates in a bulb which is smooth, the circular shank being traversed by a screw. Its serrations and those of the Bosworth's end serve to hold the cotton wool tightly when used either for application to or exploration of the nasal passages. Either end may be curved at will, but it is better not to do this if the appliance is carried in the pocket case, into which it readily fits when closed, in the manner shown in Fig. 3. The

FIG. 1.

Probe adapted for use.

FIG. 2.

FIG. 3.

Probe closed.

bulb end is convenient in diagnosis and exploration. The flat extremity is also useful for this purpose, but more especially for making applications, as those of chromic or acetic acid, nitrate of silver, cocaine &c., in the contracted space between the turbinate bodies or between these and the septum.

Having used this probe—first made for me by Messrs. Down Bros.—for some few years, I can testify to its extreme convenience and utility. It is also made by Messrs. Mayer and Meltzer.

H MACNAUGHTON-JONES.

Harley-street, W., August 1st, 1893.

## DRAFT REPORT OF THE SELECT COMMITTEE ON MIDWIVES REGISTRATION, 1893.

THE following is, subject to some slight alterations which may have been made, the report of the committee. "The General Council" is, we presume, the General Medical Council:—

1. Your committee has sat four times and has taken most valuable and important evidence, which, with that given last year at six sittings, includes that of distinguished medical men and women in various spheres of practice both in town and country, and also of trained and experienced midwives from various districts.

2. Your committee are of opinion that a large number of maternal and particularly infant deaths as well as a serious amount of suffering and permanent injury to women and children is caused from the inefficiency and want of skill of training and qualification. They find that amongst the poor many of the women now practising as midwives without proper and working-classes both in the country and in towns the services of properly trained midwives are a necessity, and consequently every precaution should be taken to discourage the practice of women who are ignorant and unqualified.

3. Your committee are of opinion that by legislative enactment no woman should be allowed to call herself or to practise as a midwife except under suitable regulations.

4. Your committee therefore recommend that a system of examination and registration of midwives should be established, and that for the purpose of admission and examination of women desiring to act as midwives the General Council shall be invited to frame rules for regulating: (1) the admission to the register either by (*a*) practice or (*b*) examination; (2) the conditions of admission to such examinations; and (3) the conditions of such examinations.

These rules and regulations should, in the opinion of your committee, be subject to confirmation by the Privy Council. In the event of the General Council failing to make such rules as the Privy Council can confirm, your committee recommend that the Privy Council should invite some other medical body to frame or forthwith cause the rules and regulations proposed in the foregoing paragraph to be framed for the purposes required, and that such rules shall take effect as if they had been made by the General Council and confirmed by the Privy Council.

5. Your committee also recommend that the duty of carrying out locally the provisions of the Act that will be required should be placed in the hands of the County Councils. They also are of opinion that greater facilities for the study of midwifery should be provided in workhouse and lying-in hospitals.

6. In conclusion, your committee desire to refer to the apprehension expressed by certain witnesses belonging to the medical profession, lest their interests might be injuriously affected by an improvement in the status of midwives. The great preponderance, however, of medical and other evidence, having regard to both the authority and number of the witnesses, was to a contrary effect. Your committee, therefore, whilst giving due consideration to the expression of such fears, believe that the suggested injury is not likely to prove serious, and they are of opinion that medical men will not only be relieved of much irksome and ill-paid work, but also that improved knowledge on the part of midwives will induce them to avail themselves more frequently and at an earlier stage than at present of skilled medical assistance in time of emergency and danger. On this point the committee had full and substantial evidence.

# THE LANCET.

*LONDON: SATURDAY, AUGUST 12, 1893.*

As announced in another column the International Medical Congress, which was to have met on the 24th proximo, has been postponed till April, 1894. This change in what the profession throughout the world had regarded as a "fixture," has come upon it as a considerable surprise. Indeed, nowhere more than in Italy does it seem to have been less anticipated, for, up to the eleventh hour, the organising committee was intimating from its seat in Rome its acceptance of "adesioni" from representative physicians, surgeons and sanitary officers all the world over—"adesioni" or pledges given on the expressed or implied understanding that the Congress was to meet on Sept. 24th. From the same central authority, moreover, till quite recently, arrangements were announced enlarging the scope and the *personnel* of the gathering, such modifications in the original programme being possible or practicable only on the assumption that the autumn and not the spring was to be the season of rendezvous. Not only the Congress, but its hardly less important accompaniment, the International Exhibition of Hygiene, was so far advanced towards completion that the time for receiving exhibits was officially declared to be closed, whilst the disposition and allocation of such as had already come to hand—many of them, be it noted, of a quality which, if not perishable, does not improve on keeping—were already in progress. Now, like a "bolt from the blue," all these preparations or finishing touches are arrested and the "triennial parliament of the healing art," as it was designated in these columns, is so far a misnomer that its next meeting will not take place till well into the "quadriennium"—the Easter of 1894.

This is much to be regretted on many grounds. As already demonstrated, "praeconis ad fastidium," the last week of September was the one period of the twelvemonth which—the climate of Rome being considered in conjunction with the business engagements of practitioners and teachers alike—was that most free from objection as the meeting time of the Congress. It was the date fixed by a common consent, which was arrived at after much correspondence and exchange of views between the leading centres of practice and education in both hemispheres. It was the date, moreover, at which the capacity of Roman hotels and *pensions* is put to the least strain by the tourist or travelling world—the date at which the Congress could have held its sittings undisturbed and undistracted by the pressure of such non-professional interests as (at Easter, for example) are at their height in the Eternal City. It was the date when, as the Romans themselves say, according to "una sperienza secolare,"—the tradition of centuries—the climate is most equable and the weather most delightful, and when the "Congressisti," having appropriately wound up their autumnal holiday by just a taste of Rome's intoxicating "Ottobrate," would return to their duties in the professorial chair, the biological laboratory, the clinical ward or the private sick-room, refreshed and sustained for the close of one working year and the opening of another. *Dis aliter visum.*

There is no doubt that the grounds on which Dr. BACCELLI and his fellow committeemen have postponed the Congress are more than sufficient to justify the step. The stealthy, insidious approaches of the Asiatic scourge, at first so insignificant as well-nigh to lull suspicion, are now transformed into something like a "reconnaissance in force," to use the military phrase, portending, if not actually announcing, a "general advance." From official, and still more from non-official, sources, particularly in France and Russia, the organising committee in Rome have received intelligence which would make further inaction culpable; intelligence that cholera has in these countries, if not in others, assumed an epidemic form, demanding the presence at the various infective foci of all the medical surveillance that can be brought to bear, and making even temporary non-attendance at the scene as unprofessional as it would be blameworthy. Italy herself, it is safe to assume, is even more gravely affected by the advancing enemy than her official intimations would let the outside world believe—at any rate she is suspending movements and gatherings customary at this season to an extent not quite consistent with such sanitary reports as appear in her public press. The grand manœuvres of her army, there is now no longer any doubt, will be suspended for the autumn or until such time as the epidemic is in full retreat. If a partial exception to this *mot d'ordre* of the "Ministero della Guerra" be made it will include (so we are on high authority assured) only such army corps as have registered no case of the disease, and even in these the manœuvres will be limited to what are called "manovre di compania." In spite of official or semi-official contradictions, we are also in a position to state that the conscription, already begun in Central Italy, has been suspended in more than one quarter of the Alta Italia, where, as our columns have already shown, there have been many cases of cholera, more than half of which have proved fatal. On the other hand, with an activity in significant contrast to the inaction of the land forces, the Italian navy will carry out its customary evolutions on the high seas—this year in Neapolitan waters.

So at whatever inconvenience to transatlantic or colonial "Congressisti"—an inconvenience, however, which could not but be less than that imposed by quarantine on their return from a cholera-stricken country—the medical world must bow to the *force majeure* of sanitary conditions and resign itself to meeting in Congress at the far less desirable season of April, 1894. Not that there are no compensations for this untoward change of programme. The meeting of Sept. 24th would, it is an open secret, have overtaxed the resources of the Eternal City, rehabilitated though it has been under no auspices more energetic than those of Dr. BACCELLI. For one thing, the influx of intending participants at the gathering so far exceeded all calculation as to be likely to put to a severe test the capabilities of even larger and richer communities than that of Rome. It was, no doubt, in compliance with the most hospitable instincts, but at the same time equivalent to a courting of confusion or worse, that the medical students of Italy—if not those of other

countries—should have been admitted to a gratuitous participation in the proceedings. When the number of what we may call legitimate members reached the formidable total of some 9000 it was surely a stretch of good-nature to add to the inevitable overcrowding by the free admission of half as many more undergraduates, whose appreciation of the discussions could at best have been imperfect. Another consideration is that the unprepared condition of the Policlinico—the edifice in which Dr. BACCELLI hopes to inaugurate the rehabilitation of Italian medicine—is such that only a limited part of it would have been available for the vast assemblage invited to meet in it next September. We are informed that a special grant has been set apart by the State for the urgent completion of the as yet but partially constructed building; but, from what we can gather, all the energy in the world, backed up by more than all the means the Italian Treasury can afford, would scarcely suffice to put it next Easter in a condition to accommodate so many thousands. The suggestion—not made lightly—that the grand structures of imperial Rome—grand even in their ruin—the Colosseum, for example, or the baths of Caracalla or Diocletian, temporarily fitted up for the biggest medical Congress the world has yet seen, might solve the difficulty of accommodation most satisfactorily. They have been used—the baths of Caracalla particularly—for similar purposes already and might be so employed again. The awning that in the heyday of the Colosseum was spread over the vast arena by the marines of the Roman navy to protect the spectators from sun or rain is a resource which might once more be made available for the meeting of 1894. The temporary woodwork that, in 1869–70, converted a transept of St. Peter's into a sufficient chamber for the multitudinous Ecumenical Council is a device that could well be applied to either of the commodious and many-chambered baths above referred to. In any case the six months gained by postponement will give the organising committee time to adjust its preparations to requirements only realised at the eleventh hour, and to mitigate its own disappointment as well as that of its guests at a sudden change of programme to a season less happily chosen than that originally selected.

---

WE can scarcely congratulate the medical gentlemen concerned in the case "*re* MACDONALD, SONS and CO., Limited," on the partial success of their application to the courts. We may assume that our readers have seen in the law reports of our daily contemporaries the chief facts of the case and the grave remarks of Mr. Justice VAUGHAN WILLIAMS in the Chancery Division of the High Court of Justice. Briefly they are as follows: certain gentlemen in July, 1892, accepted shares in the concern of Messrs. MACDONALD, SONS AND CO., stated to be fully paid up and having no liability attached to them, in consideration of which they were to prescribe the specialities made by the company—certain medicated wines and foods. The letter inviting their coöperation was in the following terms: "Enclosed we beg to send you a founder's share in this company, value £25, fully paid up. If you accept it we will ask you to prescribe our specialities." To do justice to the authors of such an insulting communication to the members of a responsible profession, it had at least the merit of perfect plainness. It had, as the Judge said, all the appearance of a bribe in consideration of which the receivers were to recommend the particular articles made by the company. The public should know that almost every day medical men receive parcels of foods, drugs &c. accompanied by a great amount of stationery. This stationery is often placed in the waste-paper basket and the remainder accumulates or is disposed of at the discretion of the medical man, and frequently in ways that the manufacturers would think disrespectful. But a bribe of £25 was scarcely to be treated in this way, and certain members of the profession, it seems, were found to treat it in the one way in which it should not have been treated. The recipients in question acknowledged receipt of the shares, and in so doing did their part to become shareholders and to signify their acceptance of what had all the appearance of a palpable and disgraceful bribe. Within three months from the allotment of shares the directors resolved to call a meeting of the company with a view to liquidation. Fortunately for these gentlemen their names had not so far been entered in the list of shareholders. Unfortunately the share certificates did not bear on their face that the shares were fully paid up, and thereupon the liquidator placed their names on the list of shareholders and required them to pay the amount of their shares.

The action at law was an application to have their names removed from the list of contributories. The Judge granted this application on the grounds that what was offered and accepted was understood to be "paid up shares"; that but for an office error or oversight they would have been registered as such; that they were not originally on the list of shareholders, and that the recipients could not be regarded as ordinary shareholders who had bought shares with liability resting on them. They have therefore escaped the liability to pay; but the Judge refused to give the applicants their costs as against the Official Receiver, and he confessed to a strong feeling, which the profession will share, that it would only have served them right if, under the circumstances of their acceptance of the shares, they were held liable as contributories. Thus, though the Judge reluctantly relieved them on legal grounds, he expressed strong censure of their conduct in a professional respect which it will be well for the authorities of the profession to note. His words are thus reported in *The Times*:—

"He said he could not part with the case without saying that it was a sad thing that members of a learned profession should have consented to take shares on these terms. It might be that the individual doctors thought well of the wares of this company and that in praising them they acted as their consciences dictated, but to take shares in consideration of praising the wares of the company was very much like taking them as bribes, and it was impossible not to have a strong feeling that if those who took shares under such circumstances were held liable as contributories it would serve them right. His lordship refused to give the applicants costs as against the Official Receiver."

That even a few members of a profession numbering over 30,000 should have so misconceived their duty is sad indeed. They must feel that they have placed their profession in a discreditable and contemptible light in a way which admits neither of excuse nor palliation. We have lately been shocked by the suggestion that the Press for a consideration will praise quack medicines, and it will be a public scandal if such

charges are not investigated to the last degree. It will be almost more scandalising to find that medical men for a consideration may praise and prescribe articles of trade and yet go scot-free. The tribunals of the profession itself would be discredited by such inaction and might be held to connive at practices which would destroy its reputation and authority.

---

THE appearance of a book on 'Mountaineering" by Dr. CLAUDE WILSON so soon after the publication of Mr. DENT'S excellent volume on the same subject in the Badminton Series may be accepted as a proof of the growing popularity of one of the finest of out-door sports. Dr. WILSON'S work, whilst smaller and less elaborate than the Badminton volume, will fill a very useful place. It contains in a handy and compact form all the essentials of mountaineering, and the information and advice given are of a thoroughly practical and trustworthy character. "To do justice to the charms of mountaineering," says the writer, "would require a much more able pen than mine. The pursuit is one which offers to its votaries keener pleasure than they find elsewhere, which leaves enduring memories free from alloy, and which stimulates to the building up of plans for future years, rivalling in fascination the memories of the past." It is idle to demand of the votary of any amusement the reasons for the pleasure which it affords him. A favourite pastime has its end and justification in itself, and if it gives hours of innocent enjoyment and promotes health of body and of mind there is no need for any further defence. The man who finds mountaineering absurd will perhaps be the first to extol the merits of yachting, or golf, or cricket, though the reasons which he alleges for his preference will on examination be found to be practically identical with those that influence the cragsman. Only those who have climbed amongst the Higher Alps or some similar range, who know the fascination of pressing upwards through snow and ice to the summit of some great peak, there to enjoy

"One crowded hour of glorious life,"

can adequately appreciate the delights of mountaineering.

The delights of mountaineering constitute one side of the picture; its dangers constitute the other. Of these Dr. WILSON writes at length and in a very thorough, yet reassuring, way. No great sport is exempt from dangers, but in mountaineering, as in yachting, shooting and other sports, natural aptitude, experience and caution tend to reduce them to a minimum. Unnecessary and avoidable dangers are such things as want of training, climbing alone, climbing out of season, climbing in bad weather or too soon after it, misuse of the rope and so on. A common error, against which we have often protested in these columns, is for persons who lead habitually sedentary lives and who are quite out of condition to rush off for their holiday to the Alps and forthwith to attempt exploits only practicable to the trained mountaineer. Even if such persons escape accident they are only too likely to return home with strained muscles or damaged heart and much the worse rather than the better for their holiday. Other dangers which may be more or less avoided or provided for are such things as a slip on ice, snow, rock or grass, falls into crevasses or through cornices, avalanches and exhaustion due to over-exposure. Amongst the unavoidable dangers may be reckoned sudden storms and falling stones. The danger from avalanches is, perhaps, less than might be supposed, and for two reasons. First, avalanches are only frequent after snow has recently fallen and the more risky ascents are made at a season when snowfalls are rare; then the usual track of avalanches is often quite well known and can be avoided. Secondly, there are various methods, well known to trained mountaineers, for testing a doubtful mass of snow before venturing upon it, and in this way one kind of avalanche can be escaped. Falling stones constitute a very serious and often unavoidable danger, and sudden storms, preventing further progress and necessitating an encampment for the night, sometimes arise in the most unexpected way. The net result of a review of the dangers of mountaineering is the conclusion that, whilst the dangers are real and some of them unavoidable, they are not greater than those that attend some other sports and they are not sufficiently grave to discredit mountaineering as a healthful pastime.

The question of the proper diet for mountaineering is an interesting and important one. Dr. WILSON recommends bread, tinned meats, sardines, jam, cheese, gingerbread nuts, chocolate, raisins, and dried prunes, and for beverages cold tea, cold coffee and either red or white wine. On a stiff day's mountaineering it is usual to take five meals—some light refreshment at 2 or 3 A.M. before starting, such as a cup of bouillon or of bread-and-milk; three meals out of doors, composed of such articles as those enumerated above; and a good dinner on returning in the evening. The writer recommends climbers "to eat as much as possible on the way up" and to drink as little as possible between meals. Drinking glacier water is to be avoided, and on the Swiss mountains it should not be forgotten that many tempting-looking streams will be found to be polluted by cattle, perhaps at some point higher up and out of sight.

Under the heading of "Hints Medical and Surgical" Dr. WILSON gives some simple but sound and valuable advice. Mountain sickness must be combatted by frequent halts and if very obstinate by descending. The sufferer is not likely to be affected more than once in the same season. Snow-blindness may be prevented by wearing coloured spectacles and if it occurs should be treated with a solution of cocaine and chloride of zinc. Sunburn may be prevented by the application of ointments or powders, lanoline and oxide of zinc being especially valuable. Frostbite may be combated by rubbing the affected part with snow and then wrapping it in cotton wool or flannel. Exhaustion may be obviated by small quantities of easily-digested food and a glass of champagne. Sprains are best treated by heat to the part and afterwards rest. Blisters on the feet may be prevented by soaping the insides of the stockings and rubbing the parts with spirit lotion.

We might pursue this fascinating subject still further, but must pause for the present. Mountaineering possesses a curious and unique charm for those who have once felt its attraction. Year by year the same persons return to the same Alpine haunts to find the same charm in peak and pass and valley. "Age cannot wither nor custom stale their infinite variety." Especially to the brain-worker is mountaineering to be commended, but let him see that he recognises and

accepts the conditions of the sport and that he does not mar a most delightful pastime by ignorance or temerity.

---

HE would be a bold man who would say that we have yet seen the last of the epidemics of influenza which have affected European nations for the last three or four years. Of course the disease is not with us, as it was, in force and on an epidemic scale. But there are still indications of an exceptional pneumonia which is not normal in its character or in its severity. And still more, there is prevalent a catarrh of some severity affecting chiefly the fauces, tonsils, pharynx, ears &c., and attended with pains in the neck and generally some swellings of the cervical gland and extreme aching of back and limbs and head, and which is not exactly the old-fashioned and familiar follicular tonsillitis. It has not the same tendency as influenza to affect a large number in a house, but yet it often affects more than one. Whether such cases imply some remains of the poison of influenza or not we shall not presume to say, but they certainly constitute a feature of what little medical practice still remains to practitioners in town in the healthy months.

It may be said that such cases are not due to influenza, but are merely catarrhs caused by the variations of temperature which have occurred since the cessation of the very prolonged heat and drought of the early summer. We are in no disposition to dogmatise on the subject. The real purpose we have is to say a few words on the remarkable want of definition of the word "influenza." We are by no means disposed to agree with Dr. GOWERS that we have added nothing to our knowledge of influenza by all the suffering and observation of the late epidemics, though we readily grant that the very vagueness with which the word has been used has of itself been a source of weakness in our conceptions of the nature of the disease and of the proper treatment of it. Dr. GOWERS' own post-graduate lecture on the subject, which we have published in our columns, must ever constitute a valuable contribution to an understanding of some of the most striking features of the disease, especially in its later stages. It is not the least advantage of the publication of this lecture that it has called forth a letter from Dr. WILKS on this subject, characterised by that close observation and strong common-sense which mark Dr. WILKS' accounts of disease. But there are one or two points in Dr. WILKS' account of the disease which add to our difficulties, in respect of want of definition, rather than diminish them. The main point with regard to which Dr. WILKS differs from Dr. GOWERS is as to the essential or non-essential character of the nervous symptoms. According to Dr. GOWERS these are sequelæ of the disease rather than essential parts of it, and are due to a toxic agent circulating in the blood — a chemical substance formed by the organisms which constitute the virus of the primary disease. The primary disease is caused by the organisms, the secondary by material which they produce. Dr. WILKS demurs to that sharply cut division and to the relegation of the neuritic phenomena to the later stages of the disease. Dr. WILKS speaks with the authority of one who has experienced the disease, and says that "the nerve symptoms constitute a very essential part of the complaint and in many cases are the primary and only symptoms?" What especially strikes us is that Dr. WILKS specifies that in many of these cases there is "no fever." He instances the case of a lady who on a certain day was quite well, though having several cases of "catarrhal influenza" in her house, and the next day "on attempting to get up found her legs weak and fell." She subsequently had nerve pains and other nerve symptoms. She had no fever. He also gives the case of a medical man who, whilst attending several cases of influenza in the winter of 1892, began to suffer from weakness in his legs and had to take to bed. He was carefully watched and never had a rise of temperature or any other symptom except a tendency to syncope.

"To some minds," says Dr. WILKS, "it seems difficult to make clear that these nerve symptoms can occur without a previous febrile state." We confess to being of the number of those who find it difficult to believe in influenza occurring without an element of fever. Certainly in the first of the epidemics the most striking character of the attacks was the sharp, short pyrexia, sometimes without catarrh. They brought back to mind the idea of a "febricula," beginning abruptly, culminating quickly, and often ending within twenty-four hours. This element of fever of short duration, we venture to say, has been the one thing, and almost the only thing, common to the conception of influenza in the midst of all the vagueness which has characterised our conceptions and definition of the disease. It is a chief element in the description of the complaint in every author within our reach, from the time of Sir THOMAS WATSON down to the present day. When so great an authority as Dr. WILKS bids us recognise influenza without fever, we are bound to reconsider our conceptions. It is natural at first to suppose, as in other equally febrile diseases, that the febrile stage has simply been overlooked; but that theory is scarcely applicable when we have such explicit statements by so careful an observer as Dr. WILKS. Henceforth, therefore, we may at least imagine influenza without a recognisable element of fever. This fact is the more noticeable as Dr. WILKS' apyrexial cases are those in which the nervous symptoms were grave and of considerable duration. In one case, that of a medical man, the disease was so painful as to be taken at first for rheumatic fever, and though Dr. WILKS does not say that in this case there was no fever he leaves it to be supposed that there was none. It is of more importance to get at the whole truth than at premature definitions which do not include all that is essential. But the belief that we may encounter apyrexial forms of influenza is one to be kept in mind.

---

THOSE members of the British Medical Association who repaired to the annual meeting, about 700 in number it is said, seem to have enjoyed a pleasant time. How indeed could it be otherwise? Newcastle-on-Tyne is one of the most active and vigorous towns in the United Kingdom and the medical profession has always been a very influential element in its society and in its intellectual and scientific activity. Members who were old enough to remember the last meeting of the Association there must have missed some of the most conspicuous of their former colleagues, notably Dr. EDWARD CHARLTON and Dr. GEORGE YEOMAN HEATH. One representative of old medicine at least is left in Newcastle, Dr. EMBLETON, whose clear intellect and general

culture give no mean idea of the men who have represented the profession in the important town of the STEPHENSONS, of ARMSTRONG, of HANCOCK and of BRUCE. Under Dr. PHILIPSON's lead the local members of the profession did all that kindness could suggest and more perhaps than an austere physiology would sanction. Of the character of the scientific and professional entertainment our readers can judge for themselves from the reports we have given, and they will agree with us in thinking that the chief addresses of the meeting were altogether worthy of the occasion. Of course, there are always critics in this *nil admirari* age, and if we do not say something critical we may perhaps be held to have said nothing. Let us see what can be suggested on the other side. Is not the number of members rather below the average? Does an attendance of 700 properly represent a membership of 14,000? Is the arrangement of work in the Sections eliminated of all dulness as effectually as it might be? Are the arrangements of the meeting such as to do full justice to the great body of practitioners who constitute, after all, the strength of the Association? Could some way not be found of bringing into the discussions more of the results of their experience? It is difficult, no doubt, in the few hours that are available to do more than let the members see and hear the chief speakers of the occasion; but it does seem to us, speaking as friendly critics, that there is little ingenuity displayed in bringing forward the more modest of the members, whose experience is rich and who might teach lessons of wisdom to many that monopolise the precious minutes that alone are available at these huge meetings. Even the grievances and the just complaints of members find but scant opportunities for expression. Sir JOHN SIMON told the world at the last meeting of the General Medical Council that such a subject as that of the Medical Aid Associations and their bearing on the reputation and morals of the profession was one for the consideration of a voluntary body like that of the British Medical Association. We said a week or two ago that we should see how far that theory was borne out by the action of the Newcastle meeting. The action of the Newcastle meeting in this matter, which has moved the profession as few questions have ever done, was actually *nil*. This is the more remarkable as at the last meeting of the Association, if we remember rightly, a committee was appointed to deal with this subject. It surely will not be contended that this matter is of no consequence, and that the profession has no interest in it. We have been informed that a member of the Association gave good notice of his intention to raise this question, but was told that he was too late. This does not explain why the leaders of the Association ignore the subject in their report. Where there is a will there is a way, and it is difficult to avoid the conclusion that the leaders had little disposition to deal effectually with a subject so vitally affecting the profession. The indisposition is not the less serious if it be based on a conscious want of power to do so. In this case what becomes of the theory that we are to look to the voluntary bodies of the profession for the remedy of a great evil? Are we to infer from the absolute silence of the Association and its leaders that it confesses to having neither interest nor power in it; that it concerns only general practitioners and not the few leading individuals and classes in the profession who are already sufficiently represented in its ruling bodies? These are questions which seem to be reasonable. They suggest that with all its organization and its resources it is still imperfect as a means of expressing the experience and the sentiments of the great body of the profession. The disciplinary powers of the Association were called into use for the purpose of removing the name of a gentleman from the roll of membership. Some awkwardness was naturally felt by the members in giving a penal vote without any knowledge of the facts and on the mere authority of the Council. The difficulty was met by the exclusion of the reporters. After this the resolution for removal was carried.

# Annotations.

**"Ne quid nimis."**

## POSTPONEMENT OF THE INTERNATIONAL MEDICAL CONGRESS.

OUR own correspondent, dating from Rome on the 3rd inst., writes: "Late last night the following 'ordine del giorno" (order of the day) was issued to a telegraph agency by the Comitato Executivo (executive committee) of the Eleventh International Congress of Medicine and Surgery: 'Considering the sanitary preoccupations in which the European States are involved; holding that by such preoccupations the practitioners of medicine will find themselves in duty bound to remain at their posts; taking also into account the authoritative intimations as to such duty that have come from the leading committees and the scientific and medical world abroad: the Executive Committee of the Eleventh International Congress of Medicine and Surgery has, on deliberation, resolved to postpone the meeting of the Congress and the opening of the Exposition till April, 1894.' This announcement has fallen on the Italian public, professional and non-professional, like a bombshell, because when (as duly reported in the columns of THE LANCET) a 'pilot-balloon" was started to similar effect last spring it was, after going the round of the European press, contradicted on authority by the Secretary-General, Dr. E. Maragliano. 'Certain political journals' were, in that official contradiction, credited with having launched the 'ballon d'essai' in question, and once more the world relapsed into the belief that, in Dr. Maragliano's words, 'the date of inauguration was definitively fixed for Sept. 24th.' Even this morning (the 3rd inst) the leading journal of Rome, the *Opinione Liberale*, was still without official intimation of the 'ordine del giorno' given above and declined to believe an early anticipation of it published in a contemporary. 'On inquiry,' said the *Opinione Liberale*, 'at the Direzione Generale di Sanità we were assured that "finora" (that is, up to the eve of the 3rd inst) 'no decision had been taken, but that certainly, if 'le malattie infettive' (infectious diseases) 'were to continue in Russia, in France and in other countries the International Medical Congress would be postponed.' In its issue of to-day the *Opinione Liberale* informed its readers that, 'nevertheless'—that is, even if the Congress were postponed—the Exposizione would still be held, and then it proceeded to give a glowing account of the labours *ad hoc* of the superintendent, Professor Pagliani, and of his coadjutors, Professor Bentivegna, Dr. Sambon and the engineer, Signor Borlenda; but later, in its 'ultime notizia' the *Opinione Liberale* had to admit the truth of what its contemporary had foreshadowed and to announce the postponement till April next of Congress and Exposition alike. As

I have indicated, this change in the time of meeting of such an ecumenical gathering has had a startling effect and has already disturbed the arrangements of a number of allied congresses which had fixed their dates with reference to this supreme one. The International Congress of Otology, for example, the fifth of the series, which was to have attracted the medical world on its way to Rome in September next and to have been held in Florence just before its great sister met in the capital, has also had to postpone its meeting. As to the disturbance of the long-adjusted arrangements of representatives from the New World and the Antipodes I can but hope that the telegraphic agencies will have forewarned them in time of the futility of starting for Rome this year. The inference, however, seems inevitable that it was only in the most imperious necessity—in which it found itself, as stated, in agreement with the other European committees—that the Comitato Executivo could have ventured at the eleventh hour to countermand an undertaking for which such elaborate preparations were in progress and in which so many distinguished consultants and teachers, whose time is so precious, had pledged themselves to take part."

## THE POWER OF THE WILL IN VOLUNTARY STARVATION.

To earn one's bread by refusing to eat is, as we have said, perhaps the ignoblest "profession" a human being could follow; but, on Pliny's maxim that no book was ever so poor that something could not be extracted from it, we can still find intellectual pabulum in the irrepressible Succi. He has been and still is, we believe, exhibiting in the Italian university towns, and at Turin in particular he has not been allowed to go without yielding some result to psychological observation. He has been under skilled medical surveillance during his forty days' performance—if "performance" is the word for what is simply "a long strike" of the alimentary process. Drs. Battistini, Della Torre and Bonelli have watched him with an intelligence worthy of the school of Lombroso, Mosso and Bizzozzero, and now we have their findings reviewed and checked by an able colleague—Dr. Donato Costanzo Eula. This observer insists upon a factor not hitherto appreciated at its true value in Succi's case—the "forza della volontà," the power of the will. Even in the lower animals starvation, if encountered of set purpose, can be withstood much longer than when that purpose is wanting. Take, he says, two full-grown sparrows, one reared from birth in a cage, one freshly captured. The latter will resent its confinement by refusing all nutrition and will stoically die of hunger, an abstinence which it will bear up against far longer than the tame bird which is denied its food from the same starting-point in time. Involuntary starvation kills its victim in from nine to ten days, a period corresponding to that assigned by Dante to the slow death by hunger of Count Ugolino. Voluntary starvation, on the other hand, has been found compatible with more than six times that duration of life. The Indian fanatic, bent on dying of hunger, will descend into a tomb and there, motionless and carefully covered over, be found still alive after an interval of from fifty to sixty days. Purpose, determinate aim, says Dr. Eula, gives a "plus" of energy to the organism, as we see every day in the runner striving to reach the winning post. A point, however, which he might have emphasised more in the distinction between voluntary and involuntary starvation is, in the former case, the absence of that most depressing of all emotions, panic. A Succi in his deliberation suffers no diminution of vital energy from the despair, the agonised outlook, the self-exaggerated sufferings of a Ugolino cast in prison to die of starvation. This, we think, a capital point in favour of the former. Reinforced by this advantage we quite agree with Dr. Eula that power of will—disciplined will, moreover—explains Succi's feats, as it also does the less striking "performances" of Merlatti and Tanner. In Succi he says he finds, indeed, a monomaniac—proud of his strength of volition and, as a young man, eager for some testing process by which he could display it. On his return from Africa, where as an explorer he had inured himself to abstinence from food, the idea occurred to him to make starvation that testing process. This purpose having been avowed in Rome he was confined in the Manicomio (lunatic asylum), but on his emerging from it he hastened to Forli in the Emilia. There he put in practice the prolonged fasting which has since become his *métier*, and there he made an accurate estimate of his powers of endurance. For he has a "method in his madness," and though he boastingly styles his performance the triumph of mind over material conditions he never attempts to exceed the limits he imposes on himself. A sixty days' fast, for instance, has been more than once suggested to him, but he has steadily declined to undertake it. Even as it is he does not get to the end of his self-inflicted abstinence with impunity. He is aged out of all proportion to his thirty-eight years. The far too deeply sunk and numerous wrinkles not only on his face but over his body tell their own tale, as also does his pallid countenance, his atrophied muscles reducing him to something like a skeleton, and the all too manifest signs of incipient marasmus. The contents of his stomach, examined from time to time, scarcely revealed a trace of hydrochloric acid, its functions being indeed semi-paralysed from frequently recurring and prolonged disease. His mental faculties, except for the volition, none of the strongest, also show symptoms, as Dr. Eula indicates, of progressive degeneration. He becomes more and more discursive, not to say incoherent, in his attempts at exposition, while his exaltation of idea rises in proportion. Proud of his title, "l'uomo digiunatore," he is sustained in it by the force of will that enables similar fanatics to bear up against equal, if other privations, till the inevitable collapse, foreseen by his Italian custodians, overtakes him and he finds his appropriate place in the psychological "annals" of his country, already rich in such examples of morbid cerebration.

## ALCOHOLISM AND ITS NEMESIS IN ITALY.

THE Commendatore Bodio, who ably directs the statistical department of the Italian Government, has just published a *résumé* of the incidence of crime in Italy in the twelve years from 1879 to 1890. Without going into the details so lucidly and instructively grouped in this masterly State paper we may draw attention to the conclusion, that "il numero degli imputati fu maggiore nel 1890 che negli anni precedenti" (the number of criminals was greater in 1890 than in the years that preceded it)—in other words, crime is on the increase in Italy. Turning for a moment from the Commendatore Bodio's paper to the recent exposition by Professor Forel of Zurich as to the increase of crime in Switzerland, we find that this increase in the Federation is due to the alcoholism which has of late years become more general; and now an Italian authority—Signor Cardarelli, President of the Commissione per gli Studi relativi alla Pubblica Igiene in rapporto alla Legge sugli Spiriti (Commission of Inquiries respecting the Public Health in regard to the Law on Spirituous Liquors)—comes to the same conclusion as to the causal coincidence between the increased consumption of alcohol and the increased crime in the contiguous kingdom. The two reports—that of the Commendatore Bodio and that of Signor Cardarelli—confirming Professor Forel's position form a most significant and instructive body of evidence, telling, indeed, the same story with which the northern races have made us so familiar, but telling it in a fulness of detail and with an accentuated succinctness which make them an invaluable object lesson for the social reformer.

Not only crime, however, but disease and the misery which is the direct provocative of both coincide with the augmented abuse of strong drink in the Peninsula. The five years from 1887 to 1891 are dealt with by Signor Cardarelli's commission, and in that quinquennium there died from alcoholism—that is, delirium tremens and dipsomania—2234 persons and of mere drunkenness 199—that is to say, 1 62 per 100,000 of the population. Another interesting fact is the distribution of this excessive indulgence in alcohol. As we might have expected, it is in the Alta Italia that it reaches its worst, whilst it diminishes progressively in the south. Just as Italy, in comparison with more northerly Europe, exhibits a less diffused and less mischievous abuse of strong drink, so in Italy herself it is in Liguria (Genoa and its Riviera) and in the Marches (Bologna and Ravenna) that this abuse is greatest, and it is in Campania, the Abruzzi and Molise that it is the least. For instance, the mortality from alcoholism rises in Liguria to 3·46, and in the Marches to 3·11, whilst in Empania it descends to 0·53 and in the Abruzzi and Molise to 0 75. By the new Italian Penal Code, which makes drunkenness a specific crime, there were 16 504 convictions of the same in 1890 and about the same number in 1891, the highest number being in Liguria, with 13 77 for every 100,000 of the population, and the lowest in Sicily, with 1·28. This diminution in the south is so far fortunate, as in Southern Italy the people are more excitable, more easily affected by alcohol and more liable therefore to outbreaks of passion, usually taking the form of "cutting and wounding." Another aggravation of this disastrous abuse of strong drink is the steady deterioration of its quality that goes *pari passu* with the increased demand for it. Nowhere is adulteration more freely or more cruelly practised than in the "acquavite" (more properly "aqua mortis") supplied to the Italian poor. "In well-nigh all the provinces of Italy," says Signor Cardarelli in his report, "the various alcohols are distilled in open violation of the most elementary requirements of the public health." If alcoholism is to increase, or if the arrest of its augmented consumption is to be an affair of the remote future, let the liquor consumed, at least in the meantime, be free from toxic ingredients." The report administers a grave admonition to the Italian Legislature to allow no interests, private or corporate, to antagonise the suppression of these adulterating practices; and it concludes: "Italy, who claims to be the first amongst States who has given to herself and to civilisation a 'codice igienico,' ought to perpetuate this noble tradition and effectively provide for the protection of her people from the calamitous results of alcoholism." To which aspiration all friends of the young kingdom—tried as she is by so many influences, internal and external, adverse to her well-being as a nation—will say "Amen."

## THE WORTHING EPIDEMIC.

WE ventured, some weeks since, to forecast that Worthing would hardly escape from its epidemic of enteric fever under one thousand attacks. This limit has unfortunately been already exceeded and fresh cases are still occurring at the rate of some eight to ten a day. The cause of this continuance is not easy of explanation, for it could easily be due to more than one cause. Thus, the specific infection of the water may be maintained and some people are certain to be continuing the use of unboiled water; or the sewers and drains may be retaining infection from antecedent cases and thus giving rise to secondary attacks; or some other cause may be in operation. Indeed, it rarely happens that an epidemic like that in Worthing ceases suddenly, even when the initial cause can be altogether removed. We regret to learn that the attempt to dam out the suspicious water has failed owing to the volume of its inflow defeating the endeavours of the divers. Perhaps another attempt may be made under altered circumstances; but a proposal is also on foot to try sand-filtration and to trust to its influence to keep out the specific organism of enteric fever. On this subject we would recall what we said in our leading article as to water filtration in THE LANCET of July 8th last, and we would advise that the matter should be very carefully considered before any conclusion is arrived at.

## PETROLEUM LAMPS.

THE London County Council has issued for the information of the public suggestions as to the construction and management of petroleum (paraffin) lamps by Sir Frederick Abel and Mr. Redwood, F.C.S. It is urged that the wick should be enclosed in a sheet of thin metal, that the oil reservoir of the lamp should be of metal and not of any fragile material, such as glass or china, and that the upper part of the lamp which comprises the burner, with tube &c., should be so constructed as to screw securely into the metal reservoir. The wicks should be soft, not tightly plaited, and should quite fill the wick-holder without having to be squeezed into it and should reach almost to the bottom of the reservoir. In using the lamp the reservoir should be first filled with oil before the lamp is lighted. Other suggestions are also made relating, amongst other things, to the stability of the lamp and to the proper method of extinguishing it. It would be well if the suggestions were adopted by the public, for there is no question that many accidents result from their non-observance.

## THE INQUIRY INTO UNHEALTHY TRADES.

THE members of the Departmental Committee appointed by the Home Secretary to consider the conditions under which chemical workers carry on their employment are: Professor P. A. Simpson (chairman), Dr. D. J. O'Neil, Mr. A. E. Fletcher (inspector under the Alkali Acts) and Mr. H. S. Richmond (inspector of factories). The other committees appointed for allied purposes are: White-lead Manufacture: Dr. Dupré, F.R.S. (chairman), Dr. Thomas Oliver, Mr. E. Gould and Mr. N. J. Cameron (inspectors of factories.) Potteries: Dr. Arlidge (chairman), Mr. W. D. Spanton, F.R.C.S. Edin., Mr. A. T. Laurie, Captain May, Mr. W. D. Cramp and Mr. J. N. Walmsley (inspectors of factories). Quarries: Hon. W. W. Vivian (chairman), Mr. W. A. Derbyshire, Mr. J. J. Evans, Mr. W. J. Williams, Mr. Le Neve Foster and Mr. F. H. Wardell (inspectors of mines), and Mr. H. S. Richmond (inspector of factories). It is satisfactory to find that the services of such excellent authorities as Dr. Dupré, Dr. Oliver, Dr. Arlidge and Mr. Spanton have been retained. Dr. Oliver's Gulstonian lecture on Lead Poisoning and the Milroy lecture of Dr. Arlidge must be fresh in the memory of the profession, whilst Dr. Dupré will bring to the inquiry the judgment of a scientific chemist and Mr. Spanton has the advantage of a large practical experience in the potteries.

## RESIGNATION OF A MEDICAL OFFICER.

MR. DOUGLAS, one of the medical officers of the Scarborough Union, has resigned his office on a somewhat unusual ground and in spite of a resolution of the board to the effect that his resignation should not be accepted. The case, as explained by Mr. Douglas, was as follows. Mr. Douglas was required to attend a woman suffering from an offensive disorder and had suggested that she should be offered admission to the workhouse. She declined this and he was ordered to continue his attendance, whereupon he resigned. The matter was discussed in the board, the lady members retaining their seats. Sir C. Legard moved that Mr. Douglas's resignation be not accepted and the Mayor seconded the motion. It was carried by a majority of four; but on being recalled into the room Mr. Douglas reiterated

his desire to resign, and on a further motion his resignation was accepted and arrangements were made for appointing a successor. Mr. Douglas stated that his reason for not attending was that there is an unwritten law in Poor-law service that such cases—"specific," we infer—are not to be attended outside, and that attendance on them involved risk to the medical officer that might compel his having to give up practice for months. A further objection made was that attendance outside would be very expensive to the Board. Mr. Douglas is undoubtedly right in urging that such cases are better treated inside, but he takes up a somewhat new attitude in actually refusing to attend such cases outside for more than a few days. The risk to the medical man is of the same kind whether the patient is in or out, though perhaps less in the first case.

## THE PREVALENCE OF DIPHTHERIA.

SEVERAL serious and fatal local outbreaks of diphtheria have been reported to us. One is near Alton, in Hampshire, and another is at Pirbright, in the Guildford rural district. Pirbright has become somewhat historic in relation to diphtheria, owing to the remarkable characteristics which the disease displayed there on the occasion when Mr. W. H. Power issued his report on the outbreak of 1882. Few reports have tended to a clearer apprehension of some points in the natural history of that disease than the one relating to the recurring prevalence which marked that outbreak.

## THE "BHAU DAJI" TREATMENT OF LEPROSY

ANGLO-INDIAN medical officers who practised in India five and twenty years ago will remember the above as one of the secret plans of treatment which from time to time spring up in India and Bhau Daji as the quack exponent of it. In the July number of the *British Journal of Dermatology* Mr. Stanley Boyd endeavours to rehabilitate the reputation of Bhau Daji and to claim for the treatment, the secret of which is now revealed, a further trial. According to Mr. Boyd, Bhau Daji was a genuine observer who only kept the secret of his remedy until he had completed his investigations which were, however, interrupted by his death; but he told three Europeans what the treatment was, under a pledge of secrecy from which time has released them. The evidence in favour of the remedy, it must be admitted, falls far short of scientific proof; yet inasmuch as the one drug on which the cure depended—viz., the oil of the hydrocarpus inebrians, popularly known amongst the natives as kauti oil—is somewhat analogous to chaulmoogra oil, of which the efficacy is acknowledged, it may be admitted that a *primâ facie* case for further and careful trial is made out, and those of our readers who practise in leprous districts might give it another opportunity of displaying its merits, a careful record being kept of the results obtained. The oil was rubbed in as well as being given internally, but for details Mr. Stanley Boyd's paper should be consulted.

## THE DIFFUSION OF SMALL-POX.

DURING the week ending August 5th there were 43 fresh attacks of small-pox in the metropolis, and on the 7th inst. 219 cases were under treatment by the Metropolitan Asylums Board. Other localities in which fresh cases are known to have occurred are, Heston and Isleworth 1, Tottenham 7, West Ham 12, Bristol with St. George 3, Walsall 2, Birmingham 5, Leicester 6, Derby 2, Salford 6, Manchester 2, Bradford 15, Wakefield 4, Hull 3, Newcastle-on-Tyne 2, Tynemouth 4. Isolated occurrences are also heard of from Keighley, Huddersfield, Leeds, Oldham, Ashton-under-Lyne, Reedness and Swinefleet near Goole, Aston Manor and Handsworth. In Bradford considerable difficulty has arisen on account of the inability to provide beds for those who are suffering from infectious disease. There are already two separate hospitals, but one being devoted to small-pox, the present prevalence of scarlet fever cannot be kept under by means of isolation to the extent to which it had been hoped would be possible. In these circumstances, it is under consideration to increase the amount of permanent accommodation for the borough.

## THE UNIVERSITY OF WALES.

THE Charter of the University of Wales has been published and has been laid before both Houses of Parliament. The constituent Colleges are the three University Colleges in Wales. Degrees are to be given in arts, science, law, music and such other faculties as may be from time to time established; but the Charter confers no power to admit to any degree in medicine or surgery or in any branch thereof.

## FOREIGN UNIVERSITY INTELLIGENCE.

*Breslau.*—The chair of Gynæcology, vacated by Dr. Heinrich Fritsch, who has gone to Bonn, has been filled by the appointment of Dr. Otto Kuestner, who followed Dr. Runge as Professor in Dorpat in 1888.

*Freiburg (Switzerland).*—A movement is on foot to establish a Faculty of Medicine on a religious (Roman Catholic) basis. Hitherto there has been no medical faculty in the university.

*Greifswald.*—Professor Rudolf Schirmer, Director of the Ophthalmic Clinic, is about to retire.

*Heidelberg.*—Dr. Eugen von Hippel has been recognised as *privat docent* in Ophthalmology.

*Marburg.*—The medical students feeling themselves aggrieved by some expressions that had fallen from one of the professors, recently decided by a large majority to give up attending all lectures and to leave the university unless the professor would retract what he had said. Some of the students were threatened with the disciplinary powers of the university, but the end of the disturbance was that the professor made the *amende honorable* and twenty students received the *consilium abeundi*.

*Munich.*—Dr. Max Cremer has been recognised as *privat-docent* in Physiology. Dr. Fritz Voit has been recognised as *privat-docent* in Medicine and Dr. Adolf Schmitt as *privat-docent* in Surgery.

*Vienna.*—It is stated that Dr. Edmund Neusser of the Rudolfs Hospital has been simultaneously offered two important appointments—viz., the Chair of Medicine, vacated by the death of Professor Kahler, and the post of Organiser of the Medical Faculty, which Prince Ferdinand has decided to establish in Sofia. Dr. F. Kraus, who has been doing the work of the Professor of the Second Medical Clinic, has been promoted to an Extraordinary Professorship.

## DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Professor Fredinand Weber von Ebenhof, formerly Director of the Vienna National Lying-in Institution, at the age of seventy-four.—Dr. Friedrich Fischel of Prague, whose name is well known in connexion with numerous researches in bacteriology and medicine.—Dr. Libbrecht, Director of the Ophthalmic Clinic in Ghent, at the age of sixty-one.

THE *Port Elizabeth Telegraph* of July 11th reports the occurrence of an accident, which at one time assumed a serious aspect, to Dr. Edington whilst engaged in some scientific experiments on the brain of a rabid dog. In

pursuing his investigations he accidentally allowed the scalpel to slip and thus inflicted a slight wound on his finger. The wound was immediately cauterised and it is hoped that no serious results will follow. In this connexion it will be of interest to the profession to learn that Dr. Edington has just brought out a new medical monthly publication, which is to be devoted to the interests of medicine in South Africa.

---

DR. HERBERT R. SPENCER has been appointed Professor of Midwifery and Obstetric Medicine in University College and Obstetric Physician to the University College Hospital, in succession to Dr. John Williams, who has resigned; Dr. G. F. Blacker has been appointed to the post of Assistant Obstetric Physician and Mr. Raymond Johnson to the post of Assistant Surgeon.

---

WE regret to have to record the death of Mr. Arthur Ellis Durham, M.A. Camb., M.B., B.C., which occurred at the London Fever Hospital on the 6th inst. Deceased, who was the eldest son of Mr. A. E. Durham, F.R.C.S., died from diphtheria contracted whilst on duty as acting resident medical officer.

---

AN ophthalmological society has just been established in Mexico. Drs. José Ramos and Fernando Lopez have been respectively elected president and vice-president.

---

MR. ROBERT AMBROSE, B.A. Q.U.I., L.R.C.P., L.R.C.S. Edin., has been returned unopposed as Member of Parliament for West Mayo, in the room of Mr. Deasy.

---

THE library of the Obstetrical Society of London will be closed from Aug. 21st to Sept. 21st.

---

THE

# BRITISH MEDICAL ASSOCIATION.

## MEETING AT NEWCASTLE-ON-TYNE.

THE enthusiasm of the local committees in looking after the welfare of their guests was everywhere evident throughout the whole meeting at Newcastle. The President on Monday entertained the members of the Council and several distinguished visitors to dinner. The President of the Section of Obstetric Medicine and Gynæcology (Dr. James Murphy) on the evening of Tuesday and again on Wednesday entertained to dinner in an hospitable manner some of the most distinguished obstetricians and gynæcologists in the kingdom. The acme of hospitality, however, was reached at the annual dinner on Thursday, which was given in the banqueting hall at Jesmond Dene. The hall was sumptuously decorated with flowers and evergreens in great variety. The long staircase leading to the banqueting hall was covered with crimson cloth, and the arrangements in the reception room and throughout the whole building were of the most approved order. Every detail was an illustration of the combination of beauty and utility for which England is renowned. The *menu*, designed by the secretary of the Dinner and Luncheon Subcommittee (Dr. James Murphy) and executed by Mr. T. B. Kennington of London, is a work of art which reflects great credit on all concerned in it. The centre of the card consists of a shield involuted at the corners and inscribed. Surrounding the shield are etchings of the various interesting buildings, industries and inventions belonging to the district. At the top are the arms of the President and of the city of Newcastle; on the left hand side of this is the church of St. Nicholas' Cathedral of Newcastle, and on the right are the massive towers of Durham Cathedral. Below, a very interesting and striking likeness of the President is to be found surrounded by some of the emblems of the art of medicine. Opposite is an illustration of the ship-building art, with a portion of the *Branksome Tower*, a new vessel being built by Messrs. Edwards and Co. At the bottom of the shield there is an excellent representation of the high-level bridge and also of the swing-bridge. At the side of this are Armstrong guns and their appurtenances, whilst on the other side is a representation of "Puffing Billy," the first locomotive engine. Underneath are tools used in mining work, the staple industry of Newcastle. Noteworthy amongst the mining appliances is the "Penny" lamp, invented by Dr. Clancy of Sunderland.

---

The topics selected for discussion in the Section of Medicine were, in two out of three instances, of neurological interest. That on atrophic paralysis was introduced in a very lucid manner by Dr. Ferrier, whose classification of the conditions leading to this change represented the last words of science on the subject. Of more directly practical interest was the other topic—important to the surgeon even more than to the physician—that of concussion of the spine, which was introduced in an exhaustive way by Dr. Byrom Bramwell.

---

In the Section of Surgery the time of the meeting on Friday was entirely occupied by the discussion on Intestinal Obstruction, which was introduced by Mr. F. Page. He contended that acute internal obstruction should be treated on the same lines as strangulated hernia and he was in favour of opening the abdomen for diagnostic purposes in obscure cases. The mortality of abdominal section for intestinal obstruction had been high from the same cause that the mortality after herniotomy had been high—viz., delays. The abdomen ought to be explored immediately after the failure of other measures. Mr. Hutchinson's speech was almost entirely devoted to the advocacy of the employment of taxis both in hernia and in intestinal obstruction in preference to operative procedure. He held that there was a special danger in opening the sac of a strangulated inguinal hernia and preferred to avoid this if it was possible. Admitting that Mr. Hutchinson has had considerable success in relieving cases of intestinal obstruction by abdominal taxis we consider that he goes too far in his opposition to exploratory and curative operations. He even said that if taxis failed in cases of intestinal obstruction the patients would have a better chance by waiting, and though some lives might be saved by operation he should be inclined to let those few go rather than to interfere. The weak point of his indictment of abdominal section for intestinal obstruction was that he referred to the bad results at present obtained without any attempt to ascertain the causes of failure. He had no statistics to present and no analysis of cases showing what interval had elapsed from the commencement of the symptoms till operation was undertaken. Had he done this it is probable that he would have found that Mr. Page was correct in his contention that such operations had been unsuccessful for the same reason that herniotomy is often unsuccessful in relieving the patient—viz., delay in resorting to it, delay which is sometimes unavoidable and sometimes preventable. In his treatment of hernia Mr. Hutchinson seems to us to be quite behind the age, for in his dread of opening the sac he entirely misses the advantages to the patient to be derived from removing it altogether. Herniectomy has proved to be as safe and in some cases safer than herniotomy. The pendulum swung too far in the opposite direction, however, when Mr. Morison stated that he never applied taxis but proceeded at once to herniotomy. Injudicious taxis has undoubtedly been answerable for many accidents, such as reduction *en masse* and for fatal results from damage to the intestine; but as at least half of the cases of strangulated hernia which come

under the notice of the surgeon are readily reducible by taxis without inflicting the least injury on the bowel it is not fair to the patient to expose him to unnecessary risk by subjecting him to a cutting and avoidable operation for a reducible rupture unless it is his express wish to obtain the additional benefit of a radical cure. The surgeon who dispenses with taxis must of necessity obtain a high percentage of successful cases after herniotomy, so that when very favourable statistics are published by any individual surgeon it becomes necessary to inquire, What success has the operator had with taxis? There is a middle course between the two extremes represented by Mr. Hutchinson and Mr. Morison, of relying mainly on taxis and of ignoring it altogether, which was supported by Mr. Page and Mr. Rivington, and we believe that it will be found to be the best, the safest and the most successful treatment. Dr. Newman, who had acted as pathologist for ten years at the Royal Infirmary Glasgow, gave striking testimony in favour of surgical interference being indicated when he stated that he had made many necropsies on cases of intestinal obstruction and had never found that the patient had died from an operation, but had frequently noticed that he had died because an operation had not been performed.

---

Those who attended the meeting of the Section of Surgery on Thursday, the 3rd, were enabled to hear the views of such leading authorities on cerebral surgery as Professor Victor Horsley and Professor Macewen. The removal of brain tumours by operation must of necessity be a matter of difficulty and danger, as well as of accuracy in regional and pathological diagnosis; therefore the suggestion made in the discussion for an earlier resort to operative interference is one which can hardly be treated on similar lines to those of other affections. The indications for intervention have yet to be clearly formulated. Too often they vary with the individual circumstances of the case.

---

In the interests of medical science and the mitigation of a standing cause of satirical comment upon the proverbial disagreement of medical men, it may be well to draw prominent attention to the resolution passed in the Section of Medicine at the close of the debate on Concussion of the Spine. The resolution, which was proposed by Professor Clifford Allbutt and seconded by his former fellow townsman, Dr. Eddison, recommended that in all legal actions arising out of personal injuries there should be consultations between the medical men on both sides. The resolution was carried unanimously and we feel sure that the profession generally will endorse this vote.

---

In the Section of Public Medicine the President (Dr. H. E. Armstrong) read a paper on Cholera Precautions in the North of England. After giving some statistics concerning vessels arriving at and departing from northern ports, he went on to say that the measures taken by the authorities or with their concurrence were of two kinds—1st, those for the exclusion of cholera; and 2nd, those for the limitation and extinction of the disease in cases which might pass the first line of defence. How those purposes might be subserved were then explained and illustrated. Figures were quoted to show that many ports were unprepared to guard against cholera, and Dr. Armstrong deplored the parsimony of the controllers of the national exchequer in not providing the means by which the enemy might be kept at bay. Finally, he begged strongly to commend to the profession the use of a wrapper and head covering to be put on in the lobby of the house in which any infectious case might exist, and to be taken off and disinfected immediately after leaving the sick room.

Dr. Grainger Stewart, in proposing "The Army, Navy and Reserve Forces," was particularly happy. He drew a parallel between the responsibilities of members of the medical profession and those of men in command of Her Majesty's ships and armies. He had always thought till the other day that the medical profession was the most terrible one in the world; but when he heard of the sad troubles and difficulties which beset men in the field and the men who were in command of big vessels he could quite understand that even the responsibilities of medical men were slight when compared with those which fall to the men who command great ships and those who command great armies. The medical profession was thoroughly in sympathy with those men.

---

The ceremony of conferring the degree of D.C.L. *honoris causâ* upon prominent members of the Association took place in the banqueting hall of Durham Castle at a special convocation of the University. There was a large attendance, including many ladies. In making the presentations to the Warden (Dean Lake), Professor Philipson gracefully referred to the personal merits and public work of each of the gentlemen who had been selected for the honour—namely: Mr. Joseph White, retiring President of the Association; Dr. W. Withers Moore, retiring President of the Council; Mr. H. T. Butlin, treasurer of the Association; Dr. Drummond, Dr. Geo. H. Hume and Dr. Cullingworth, who had delivered the Addresses in Medicine, Surgery and Gynæcology; Sir Walter Foster, M.P. Vice-President of the Association; and Mr. E. Hart, chairman of the Parliamentary Bills Committee and editor of the Journal of the Association.

---

Visitors to Newcastle, whether scientific or on pleasure bent, scarely ever fail to include Rothbury and Craigside in their programme. The salubrity of the air of the locality in which these famous strongholds are situated is not the only feature worthy of honourable mention. Many of the members of the Association availed themselves of the opportunity of paying a visit to both of the above-named places, and were greatly interested with their historical associations and much pleased with the hospitality shown to them by the rector of Rothbury and subsequently by Lord Armstrong of Craigside. At the former place the party was met by Mr. Barrow, Dr. Jack and Mr. Dixon, who acted as conductors and who pointed out the noteworthy features of the locality. Repairing to Craigside, the party were entertained by Lord Armstrong with great hospitality.

---

In connexion with the meeting and in honour of the occasion an ambulance review and military tournament were held on Saturday at Gosforth Park, under the command of General Sir Henry Havelock-Allan, K.C.B., V.C. This event also passed off with *éclat* and was highly spoken of as a display of the great efficiency which the ambulance service had reached. The tournament was under the direction of Lieutenant Trussler, R.A., and included tent-pegging, lemon-slicing, wrestling on horseback and other exercises in keeping with the pastime.

---

Amongst the excursions participated in by many of the members of the Association on Saturday was the visit to Wyndward Park, the seat of the Marquis of Londonderry, who was recently elected an honorary member of the Association. The invitations were limited to one hundred. Though the weather was not so favourable as might have been wished, the excursion was rendered very agreeable by the hospitality of the Marquis of Londonderry, who spared no efforts to enhance the enjoyment of the guests. At the luncheon which was provided Lord Londonderry proposed "The British Medical Association," and in doing so paid high

compliments to the medical profession. Dr. Philipson replied, and in his turn proposed the health of the host. In the course of his remarks he said that the pleasurable incidents of the visit to Wyndward Hall would ever be remembered by the members who had partaken of his lordship's hospitality.

On the same day (Saturday) other visits were paid by the members of the Association. Amongst these that to the Roman Wall and another to Warkworth and Alnwick should not be overlooked in anything like a complete record of the experiences of the visitors. The latter excursion was probably as enjoyable as any referred to in this summary; but there was so much to see that, to save time, it appeared necessary that the party should be divided, and so whilst one section chose the walk to the Hermitage, the charming features of which were pointed out by Mr. C. Hodgson, another section preferred to spend some time in exploring the precincts of that interesting ruin. Subsequently, however, these sections were united and the whole party drove to Alnwick Castle, where they were entertained by Earl Percy at luncheon.

Last week at Newcastle Dr. Thomas Grainger Stewart, Professor of Physic in Edinburgh University, was presented with a life-sized portrait of himself painted by Sir George Reid, President of the Scottish Royal Academy. The portrait, which has been executed at a cost of 300 guineas, bears the following inscription:—"Presented to Thomas Grainger Stewart, M.D., Professor of the Practice of Physic in the University of Edinburgh, by former pupils as a token of their gratitude and esteem. August 3rd, 1893." Dr. G. Sims Woodhead made the presentation. The testimonial came from old students of Professor Grainger Stewart, who are now scattered all over the globe, subscriptions having been sent from all parts of Europe, Asia, America and Australasia.

Other visits by members of the Association were to the Elswick Works and to Saltburn, and in each case afforded considerable gratification. The directors of the gigantic works of Armstrong and Co., with the utmost courtesy, afforded the visitors every opportunity of gaining an insight into the details of the machinery, the results of which have astonished the world. The visit to the charming scenery around Saltburn, now at the height of the season, formed another event which served to enhance the interest connected with the meeting of the Association in 1893.

Amongst the events of interest in connexion with the Newcastle meeting may be mentioned the visit of some fifty of the members of the Association to the works of the United Alkali Company at Gateshead. Under the intelligent guidance of the manager the prominent features of the works were succinctly explained, and after a tour of the premises luncheon was provided by the firm. Visits of inspection were also paid to the yard of Messrs. Clark, Chapman and Co. of the same town, where were shown electric lighting apparatus, steam machinery &c., for which the firm has a world-wide reputation. The Newburn Steel Works also came in for an appreciative visit in the course of the afternoon. Altogether the members who availed themselves of the above-named opportunities for enlarging their views of men and things had no reason to regret the time thus spent.

The Conversazione of the Association, which brought together a brilliant assemblage, took place at the Art Gallery in Grainger-street, at the invitation of the President and executive committee of the Association. Representatives of nearly all the learned and scientific societies in the surrounding district were present. The guests were received by the President (Dr. Philipson) and other officers of the Association, who spared no pains to make the evening a thoroughly enjoyable one.

A Conversazione was held on the 2nd inst. in the Natural History Museum, at which the Mayor and Corporation of the town received the members of the Association who were present on the occasion. Most of the civic authorities also attended. Profuse displays of drapery and of flowers and shrubs were not wanting to add to the festivity of the occasion. The only drawback to the success of the gathering was the failure for a time of the electric light, which had to be supplemented by the use of the comparatively dim gas jets.

At the invitation of the Sheriff of Newcastle (Mr. Lord) and Mrs. Lord a garden party was given on Friday, to which a large number of the visitors were invited. The guests included the Mayor and other prominent citizens.

Another feature in connexion with the Newcastle meeting was the opening of the new buildings comprising the Newcastle Home for Incurables. This function was performed by the Mayoress (Mrs. E. Culley) in the presence of a large company of ladies and gentlemen, amongst whom were to be noticed a goodly number of the members of the Association, including Professor Philipson and Dr. Ward Cousins. The *Newcastle Daily Chronicle* gives a somewhat elaborate account of the principal features of this new hospital, which were described by Alderman Richardson in his opening address as well as in the speech delivered by Dr. Philipson after the ceremony had been performed.

Amongst the distinguished guests who assembled at the annual meeting may be mentioned Professor Eduardo Gampietro, of the University of Pavia, who, it was understood, had, at the invitation of the Council of the Association, travelled expressly from Italy to be present at Newcastle. At the banquet at Jesmond Dene Dr. Drummond called upon Professor Gampietro to make a few remarks, in the course of which he paid a high compliment to the courage and love of freedom of the English nation. Their domination, he said, was a guarantee for the freedom of commerce and the independence of thought throughout the world.

A number of the members of the British Medical Association on the invitation of Dr. Armstrong and Mr. Lewis, the city engineer, inspected the cholera hospital on Newcastle Town Moor on the 4th inst. Much interest was shown by the visitors in the disinfecting apparatus and especially in the steriliser.

The British Medical Temperance Association had a stall which was laden with medical temperance literature, specimens of varieties of non-intoxicating wines, views of the Dalrymple Home and other institutions for inebriates, and the portraits of medical abstainers which have appeared in the organ of the Association, the *Medical Pioneer*, including Sir B. W. Richardson, Drs. Nathan Davis, Norman Kerr, Thos. Morton and C. R. Francis, members of the Council, with the honorary secretary. Dr. Ridge attended at the stall and explained the work of the Association to a large number of medical men.

## GENERAL MEETINGS.

### THE THIRD GENERAL MEETING.

This meeting was held in the Assembly Rooms at Barras Bridge, the President, Dr. PHILIPSON, occupying the chair. Beside him were seated the Dean of Durham (Dr. Lake) and other distinguished gentlemen. There was a good attendance of members. The President having acknowledged in courteous terms the presence of Dr. Lake, in his dual position of Dean of Durham and Warden of Durham University, proposed the hearty thanks of the meeting for his kindness in attending. In reply, Dr. Lake made some very flattering remarks on the connexion of the medical school at Newcastle with the Durham University. Newcastle, he said, had no doubt taken a great scientific position for

many years, and he hoped it would occupy a similar position in literature. Medicine could not do anything without literature, and medical men had produced some of the greatest literary works of their time.

### PRESENTATION OF THE STEWART PRIZE.

The President then presented to Dr. Thorne Thorne, principal medical officer of the Local Government Board, the Stewart Prize. The prize is the interest of a fund left by the late Alexander Patrick Stewart to be awarded from time to time in recognition of important work already done in connexion with the origin, spread and prevention of epidemic diseases. The prize was awarded to Dr. Thorne Thorne for the work he had done in the subject of diphtheria and his coördinating influence with the scientific staff of the Local Government Board. Dr. Thorne Thorne acknowledged the address in most felicitous and graceful terms.

### ADDRESS IN SURGERY.

The address on the Evolution in Surgical Principles was then delivered by Dr. G. H. Hume, and on the motion of Mr. Pridgin Teale, seconded by Mr. H. T. Butlin, was accorded a hearty vote of thanks.

### THE CONCLUDING GENERAL MEETING.

This was held on Friday, Aug. 4th, at 11 o'clock A.M. in the Assembly Rooms. The President read a letter from Lord Londonderry thanking the Association for the honour they had done him in electing him an honorary member of the Association. Dr. Cullingworth then delivered the address on Obstetrics and Gynæcology. At the conclusion of the address Dr. Murphy, President of the Obstetrical Section, moved a vote of thanks to Dr. Cullingworth. This was seconded by Professor Pozzi of Paris and carried with acclamation. Votes of thanks to the corporations, the various committees and local gentlemen who had contributed to the success of the meeting were duly accorded, and the sixty-first annual meeting was brought to a conclusion by a vote of thanks to Dr. Philipson for the able, dignified and courteous way in which he had conducted the proceedings of the Association. This was accorded amidst loud cheers.

---

## THE SECTIONS.

### MEDICINE.

#### THURSDAY, AUG. 3RD.

*The Pathology and Distribution of Atrophic Paralysis.*

The PRESIDENT (Dr. Ord) took the chair at 10 o'clock and called upon Dr. DAVID FERRIER to open the discussion on the subject of the Pathology and Distribution of Atrophic Paralysis.

Dr. FERRIER said that he intended to confine his attention to paralysis followed by, or dependent on, degeneration of the muscular fibres. Muscular degeneration or atrophy might arise either from lesion of the multipolar cells of the anterior cornua; or from what is practically the same thing, lesion of the motor nerves; or from conditions primarily affecting the muscular fibres themselves. Thus we might have what has been termed myopathic, neuropathic or myelopathic amyotrophy, or these different forms might be more or less combined with each other. Lesions of the dendritic processes might cause paralysis having all the features of a special paralysis but without the muscular degeneration which ensued when the cells themselves are destroyed. Affections of the dendritic processes occurred in the course of syringomyelia and possibly also in Landry's paralysis. Of atrophic paralyses of myopathic origin there were the well-known pseudo-hypertrophic paralysis; the hereditary muscular atrophy of Leyden and Moebius, in which there are progressive atrophy and enfeeblement, beginning in the lower extremities and pursuing an ascending course to the thigh and lumbar muscles; the type termed by Erb "juvenile muscular atrophy," which principally affects the muscles of the shoulder girdle and upper arm, but which may also extend to the lower extremities; and, lastly, the Dejérine-Landouzy type, in which the disease begins in the muscles of the face and gradually extends to those of the shoulder girdle and upper arm, constituting what has been termed the "facio-scapulo-humeral type." These all agree in their slow progress, in their commencing in childhood or early adolescence and in being hereditary or occurring in more than one member of the same family. The affected muscles alter in volume; some exhibit diminution, others increase, being due either to true hypertrophy of the muscular fibres or to a false hypertrophy dependent on increase of the connective tissue and deposition of fat. They are further characterised by diminution of mechanical and electrical excitability, by the absence of the reaction of degeneration and by the absence of fibrillary twitchings. There is a gradual extinction of the tendon reflexes and there is also a tendency to distortion of the limbs consequent on shortening of the affected muscles. In such cases there was strong evidence to show that the disease was primarily of the muscular fibre. Following the hypertrophy of the muscular fibres there were slight increase and nuclear proliferation in the connective tissue. The second group of atrophic paralyses were those dependent on lesion of the peripheral nerves. After separation from the anterior cornua the muscles not only became functionally inactive but also underwent degeneration. The degenerative changes in the nerves and muscle exhibited themselves in alterations in the response to electrical stimulation, varying from mere quantitative modification to the well-known total inversion of the normal formula constituting the so-called "reaction of degeneration." There might be total or partial block of a nerve trunk in these cases. Thus, in cases of pressure upon a nerve the sensory functions of a mixed nerve suffered less than the motor. Motor-conduction might be entirely blocked whilst the transmission of sensory impulses was comparatively free. Primary peripheral or polyneuritis was now believed to exist as the result of certain poisons being introduced into the blood, such as lead, arsenic and alcohol; or as the result of specific organisms or their products, as in diphtheria, beri-beri and certain forms of malaria. In these cases there was developed a degeneration or parenchymatous degeneration of the peripheral nerves. One of the chief characteristic of multiple neuritis, however induced, was that the affection of the nerves, whether sensory or motor, was symmetrical. In the limbs the motor symptoms showed themselves first as a weakness or paralysis, more particularly of the extensors of the toes and tarsal flexors of the feet and of the extensors of the fingers and wrist, simultaneously or consecutively. Special peripheral nerve poisons had special affinities for certain muscles. Sensory symptoms were also present in these cases, such as perversion or diminution of cutaneous sensibility, together with pain and tenderness in the muscles and in the course of the nerve trunks. The morbid appearances were more especially marked in the distal extremities of the nerves; whilst as a rule the anterior and posterior roots, as well as the anterior cornua, were free from lesion, but not invariably. Erb believed that the primary origin of the parenchymatous neuritis was a functional or dynamical condition of the anterior horns. On the theory that in cases of poisoning by lead, alcohol &c., there were a general impairment of the nutrition of the spinal centres and a peripheral neuritis, it would follow that such muscles would be most affected which had the lowest trophic representation and were dynamically the feeblest. On this hypothesis the extensor communis should be first paralysed, then the extensors of the wrist and lastly the extensors of the thumb and the deltoid before the triceps in the upper arm. In the lower extremity the extensors of the toes, then the peroneal muscles and then the tibialis anticus and the extensor cruris before the hamstrings and other muscles of the thigh. This agreed in all essential respects with the order in which the muscles were affected in lead palsy. Of the atrophic paralyses due to central causes—the myelopathies proper—there were three great groups, according as the lesion affected the upper bulbar, lower bulbar or spinal nuclei, constituting the clinical types, ophthalmoplegia, bulbar paralysis and atrophic spinal paralysis. The same degenerations were observed in the muscles as in peripheral neuritis, and they exhibited sooner or later the polar changes characteristic of the reaction of degeneration and were the subject of those fibrillary twitchings which were so conspicuous by their absence in the myopathic form of atrophic paralysis. In ophthalmoplegia dependent on disease of the upper bulbar nuclei the internal muscles of the eye might alone be affected (ophthalmoplegia interna), or the respective conjugate movements of the eyeball might be affected singly or conjointly (ophthalmoplegia externa), or all the muscles of the eyeball might be paralysed and atrophied. In bulbar paralysis the atrophic paralysis of the lips, tongue and palate pointed either to a community of innervation of these muscles from the same centre or from separate centres which are functionally closely related to each other. In spinal amyotrophy the distribution of paralysis depended on the position and extent of the lesion in the respective segments of the spinal cord. The progress of the disease was not *per contiguitatem* of the muscles but of

the centres in the cord. As the disease progressed those muscles resisted the longest which had the most numerous connexions with the various segments. This was especially true of the triceps, which was usually the *ultimum moriens* of the arm muscles. The last form of myopathy was that which occurred in connexion with injuries or inflammation of joints—namely, arthritic muscular atrophy. This form of atrophy affected particularly the extensor muscles of the joints. Thus the deltoid especially wasted when the shoulder-joint was affected, the triceps when the elbow, the extensors of the forearm when the wrist, the glutei when the hip, and the quadriceps extensor cruris when the knee was affected. The wasting often occurred with great rapidity. There was no reaction of degeneration. The rapidity of the atrophy and other facts negatived the hypothesis that these were cases of atrophy from disuse.

The PRESIDENT of the Section thanked Dr. Ferrier for his exhaustive and profound paper. In the discussion which followed Dr. Alex. Robertson, Dr. Handford, Dr. Coley, Professor Grainger Stewart, Dr. Barnes and Dr. Drysdale took part, after which Dr. FERRIER replied.

### *Influence of Heredity in Phthisis.*

Dr. SOLLY (Colorado Springs) read a paper on the Influence of Heredity in the Progress of Phthisis. His experience was that the results of treatment were better in the hereditary than in the non-hereditary cases, the explanation being probably in the main that the knowledge of the family predisposition led to advice being earlier sought and also to its being better followed. Possibly also a family taint might produce attenuation of the virus.

### *Aneurysm.*

Dr. DAVID DRUMMOND gave a very interesting demonstration on Aneurysm, employing the lantern. He pointed out that the disease was very frequent in the neighbourhood of Newcastle and his opinion was that in the great majority of cases syphilis was present. The element of strain was also usually present and it might be, on the one hand, that strain operated on arteries degenerated by syphilis or, on the other hand, that syphilis attacked vessels weakened by strain. He had found that the most common age for aneurysm was about thirty-nine or forty; and this seemed to indicate that atheroma could not be the usual antecedent condition. The disease occurred later in life in the case of women than in that of men, the explanation probably being that the occupations of the former were less laborious and that they were able to take better care of themselves. He had found aneurysm to be very frequent at that part of the descending aorta where the vessel begins rapidly to contract in calibre. This part he was in the habit of calling the "aortic spindle." Rest and iodide of potassium were by far the most important remedial agents.

The following took part in the discussion which ensued: Dr. Eddison, Dr. Barnes, Dr. Drysdale, Mr. Redmond, Dr. Brookhouse, Sir Dyce Duckworth, Mr. Valentine and the President of the Section. The balance of opinion was against recognising syphilis as the most important factor in the etiology of aneurysm.

### *The Cold Bath Treatment of Typhoid Fever.*

Mr. C. S. REDMOND read a paper on this subject. His experience of this method of treatment, though limited to a few cases, was very favourable and he regretted the small progress which it had hitherto made in British practice. He found that by the cool bath the most serious features of the disease were kept in abeyance and that the mortality was much reduced. The only important contra-indications were intestinal hæmorrhage, perforation and cardiac failure. He believed that the worst features of typhoid fever were due to the prolonged pyrexia and that this was to be obviated by the continuous use of the bath.

### *The Physical Signs in Chlorosis.*

Dr. F. C. COLEY read a paper on the above subject. He believed that mitral regurgitation due to chlorosis was much more common than was usually believed and that it was due to dilatation of the left ventricle. He had often found cases of chlorosis in which a bruit was heard at the apex, in the axilla and at the posterior angle of the scapula. Of 400 cases of chlorosis he had found 278 which presented a bruit at the apex and 123 had also a bruit at the angle of the scapula.

## FRIDAY, AUG. 4TH.

### *Concussion of the Spine, with special reference to Railway Accidents and Injuries.*

The President, Dr. ORD, took the chair at 9.30.

Dr. BYROM BRAMWELL opened a discussion on the subject of Concussion of the Spinal Cord, with special reference to Railway Accidents and Injuries. The subject was, he said, one of the greatest practical importance; it interested all members of the profession and it lent itself admirably to discussion and debate. As everyone knew, there was much difference of opinion as to the frequency with which concussion of the spinal cord occurred and as to the pathology and significance of the nervous symptoms which so frequently resulted from railway accidents and injuries. These differences of opinion were frequently emphasised and brought into painful prominence in courts of law. It was eminently desirable, both in the interests of the public and of the profession, that an endeavour should be made to arrive at a common understanding and agreement as to the nature and significance of these cases. He was not without hope—indeed, this was his chief object in selecting the subject for the discussion—that a public debate at this meeting of the Association would do much to settle some of the disputed points and to enable the profession to make up its mind once for all as to the true significance of these cases. Fortunately the frequency of railway accidents and injuries had greatly diminished since the introduction of the Westinghouse brake and the block system of signals; but accidents did still, and would no doubt continue to, occur. He then asked what was meant or what should be meant by the terms "concussion of the spine" and "concussion of the spinal cord." It was obviously essential, before commencing the discussion, that they should be agreed as to the meaning of these terms. It was unnecessary to say that concussion of the spine was of much wider significance than concussion of the spinal cord, and yet in the estimation of the public and of the lawyers they were commonly regarded as being the same thing; indeed, the popular idea and definition of concussion of the spine and concussion of the spinal cord were even more extensive and indefinite than this statement would imply. A man who received a general shake in a railway collision and who had not received any direct injury to the back or spine very frequently suffered subsequently from a train of distressing nervous symptoms, amongst which pain in the back was in many cases prominent. Such a patient was popularly considered to be suffering from concussion of the spine. The public and the lawyers, and in some cases even medical men too, concluded that the symptoms which he manifested were due to concussion of the spinal cord. Such a conclusion was, he thought, in most cases altogether unwarranted. In most cases of this description there was, he considered, no evidence to show that the patient had received a concussion of the spinal cord at the time of the accident or that the symptoms from which he subsequently suffered were the result of an organic lesion of the spinal cord or its membranes. The differences which existed in the minds of the profession as to the nature and significance of these cases were no doubt partly due to the fact that two separate and distinct meanings were attached to the word "concussion," and that the two separate and distinct things which these two meanings implied were frequently confounded with each other. In one sense, the word "concussion" was used to indicate the mode of injury or violence; in another, the functional or structural change which was produced, or which was supposed to be produced (but this was a very different thing), in the spinal cord by an injury. A case of very severe sprain of the back, due to a fall from a horse, in which for many weeks severe pain and tenderness on percussion and movement persisted in the back, but in which there were absolutely no nerve symptoms, was then described. In commenting upon this case Dr. Bramwell said that it was, of course, impossible to draw general conclusions from individual cases, but he would ask the surgeons present this question—Was it not the fact that cases of concussion of the spine, similar to the one which he had just related, in which none of the symptoms of "railway spine" were subsequently developed, were not unfrequently met with in ordinary practice? And in the second place he would ask those gentleman who had large experience of railway cases—Would they not expect, would it not be an almost invariable result, that such a severe concussion of the spine as was present in this case, would, if the injury had resulted from a railway collision, have been followed by the usual train of

nervous symptoms which, for the sake of brevity, might be described as being indicative of "railway spine?" It was very important to draw a line of distinction between cases of sprain of the back or concussion of the spine and cases of concussion of the spinal cord. It was no less important to come to a definite understanding as to the meaning of the term "concussion of the spinal cord." Some writers would seem to include under this term almost every lesion of the spinal cord which either immediately resulted from, or at a subsequent date followed, traumatic injury, whether directly applied to the spine or to the body generally. The term "concussion of the spinal cord" should, he thought, be strictly limited to those cases in which undoubted symptoms indicative of derangement of the function of the spinal cord were directly due to a shock communicated to the cord as the result of external violence and in which there was no obvious naked eye lesion in the bones, membranes or cord itself to account for the condition. It might, he said, be argued, if this definition were accepted, that it was impossible, unless the patient died, to prove whether the case was one of mere concussion or of contusion; in other words, whether the symptoms were the result of concussion without any obvious naked eye lesion or of contusion with a distinct naked eye lesion, such as an extravasation of blood. This, of course, had to be admitted. Further, it might be argued that since persons who were injured in railway collisions very rarely died, and since it was therefore fortunately impossible to apply the post-mortem test in the vast majority of railway cases, it was impossible to say whether persons suffering from "railway spine" were suffering from concussion of the spinal cord or not. This objection would, of course, only hold good if it were admitted that the nervous symptoms which were present in cases of "railway spine" were of spinal origin; but this was one of the points in dispute. Waiving this objection, however, it might be granted that the only method of arriving at a satisfactory conclusion as to the nature and significance of the nervous symptoms which were present in cases of "railway spine," and which it is alleged are the result of concussion of the cord and of subsequent organic changes produced in the cord or its membrane by such concussion, was to contrast the character, progress and course of the symptoms which are present in cases of "railway spine" with the character, progress and course of the symptoms which result from undoubted traumatic injuries of the cord, undoubted concussion of the cord and undoubted disease of the cord in ordinary everyday practice, and to see where in the two classes of cases the symptoms corresponded with, or differed from, one another. The spinal lesions and diseases which resulted from traumatic violence might be arranged in the following groups: 1. Cases in which the spinal bones were fractured or dislocated and in which the cord was contused or compressed by the bone lesion. 2. Cases in which, after a blow on the back, a twist of the spine or a violent concussion of the spine due to a fall on the feet from a height grave and persisting but not necessarily permanent symptoms indicative of interruption of the function of the spinal cord immediately followed upon the receipt of the injury, but in which there was no evidence of fracture or dislocation of the spinal column. In these two groups of cases the nervous symptoms (though they might differ in degree) were, practically speaking, the same and their significance was unmistakable. No one with the smallest pretence to medical knowledge could have any difficulty in concluding that in such cases the symptoms were indicative of a grave lesion of the spinal cord, its nerve roots or its membranes. These cases should not be included under the term "concussion of the spinal cord." Cases of this kind very rarely indeed resulted from railway accidents and injuries; and in any cases of this kind which did result from railway injuries there could be no difficulty as to the diagnosis. These were not the cases which gave rise to differences of opinion in courts of law. 3. Cases in which after a blow or fall on the back, or a twist of the spine, or a fall on the feet from a height typical and characteristic symptoms indicative of undoubted disease of the spinal cord or its membranes were subsequently developed. In some cases of this kind distinct indications of derangement of the function of the spinal cord were observed immediately after the accident. In others there were no immediate nervous symptoms; the spinal symptoms did not develop till after an interval, sometimes a considerable interval, of time. Cases of this kind were uncommon in private practice after ordinary injuries and extremely rare after railway accidents and injuries; but they did occasionally occur. He directed especial attention to the extreme rarity of chronic inflammation of the membranes of the spinal cord, (a condition which was supposed by some authorities to be the cause of the nervous symptoms in cases of railway accident and injury) as the result of blows or falls on the back or other forms of injury. These facts, if they were facts, were, he said, of the greatest significance. Injuries to the back, and, as he would presently show, severe injuries to the back which were immediately followed by distinct and definite symptoms indicative of concussion of the spinal cord, were of common occurrence; but such injuries were only in very rare and exceptional cases followed by unmistakable organic disease of the spinal cord or its membranes. Such common diseases as transverse myelitis, locomotor ataxia and progressive muscular atrophy could only in a very small proportion of cases be attributed to traumatic injury. It was a remarkable fact that these undoubted cord lesions were met with very rarely indeed in persons who had previously suffered from railway accidents or injuries. Some of these diseases were so common that on the mere theory of chances they ought every now and again to occur in persons who had been injured in railway collisions. As he had already said, he had never met with any case of the kind himself. The wonder was not that they did occur but that they so very rarely occurred. The possibility of the mere coincidence of occurrence must be remembered. The fact that such a disease as locomotor ataxia did develop after injury to the back did not necessarily show that it was due to the injury to the back. Each case had to be individually considered before any such conclusion could be arrived at. Whilst he was willing to admit that all these diseases did occasionally result from traumatic injury and every one of them might in rare and quite exceptional instances result from injuries received in railway accidents, he emphatically maintained that such a mode of origin was most uncommon and quite exceptional. It constituted no argument whatever for the belief—on the contrary, he maintained, that it was a very strong argument in opposition to the belief—that the nervous symptoms which so commonly resulted from railway accidents and injuries were due to organic disease of the cord or its membranes. 4. Cases in which, after direct injury such as a fall of coal or stone on the back, symptoms clearly indicative of concussion of the spinal cord occur. In ordinary private practice concussion of the spinal cord was in his experience rare, but he was not a surgeon. In colliers concussion of the spinal cord seemed not unfrequently to result from falls of coal or roof on the back. So far as he knew this fact was not generally known to the profession; but it was one of the greatest practical importance in relation to the concussion of the cord which was supposed to result from railway accidents and injuries. Colliers were, perhaps more than any other class of the community, exposed to direct injuries to the back in consequence of falls of coal and stone. In some cases—fortunately they constituted only a small proportion of the whole—the spine was fractured or dislocated; in such cases characteristic symptoms of transverse myelitis or acute meningitis and death or permanent paralysis resulted. In other cases—and he was informed that they frequently occurred—a fall of coal or stone on the back produced temporary paralysis of the bladder, temporary numbness or temporary loss of power in the legs. The paralysis of the bladder not unfrequently persisted for several days, or even in some cases for two or three weeks. Obviously, therefore, it was not merely the result of general shock; in other words, it was not analogous to the retention of urine which so frequently occurred after fractures, surgical operations and, in fact, after every kind of severe injury. The paralysis of the bladder and the loss of power and numbness in the legs were evidently the direct result of sudden derangement of the functions of the spinal cord, and were produced by the injury to the back. There could, he thought, be no doubt that in many of these cases the spinal symptoms were the result of concussion of the spinal cord, properly so-called. Now if concussion of the spinal cord was a common cause of spinal meningitis, meningo-myelitis and organic disease of the spinal cord we should naturally expect that colliers whose spinal cords had been concussed in the manner which he had just described, would frequently suffer from these lesions and diseases; but as a matter of fact they very rarely, if ever, did so. Again, if the symptoms of "railway spine" were the result of concussion of the cord and of organic disease of the cord and its membranes, the result of concussion of the spinal cord, colliers whose spinal cords had been concussed ought to manifest the train of sym-

ptoms which occurs in cases of "railway spine"; but as a matter of fact they rarely, if ever, did so. He had collected a large and weighty body of evidence in support of all these propositions. He had obtained information from several leading medical men connected with collieries in Northumberland and Durham and in Scotland and Wales. No one of these gentlemen had ever seen organic disease of the spinal cord result from a fall of coal or stone on the back, except in those cases in which the spinal column had been directly and distinctly injured—i.e., fractured or dislocated. Only one of them had seen, and that only in a single instance, the symptoms of "railway spine" follow a fall of coal or stone on the back, or the concussion of the spinal cord which this injury seemed so frequently to produce. He should not be surprised to hear that in some instances organic disease of the spinal cord did result from falls of coal or stone on the back; but even if this did occur in rare and exceptional cases the facts which he had collected conclusively showed: (1) that falls of coal on the back frequently produced concussion of the spinal cord; (2), that the symptoms indicative of such concussion were in the vast majority of cases merely temporary; (3) that colliers whose spinal cords had been concussed very rarely suffered from organic disease of the spinal cord or its membranes; and (4) that they very rarely indeed manifested the train of symptoms which so frequently occurs after railway accidents and injuries. The last two conclusions might in the future be of no small importance, irrespective of the subject of railway accidents and injuries. The tendency of modern legislation was to compensate *employés* who had been injured, provided that the accident was not the result of their own carelessness or error. He ventured to predict that if the Legislature should enact that colliers who have been injured by falls of coal were entitled to compensation for the injuries so received, persisting nervous symptoms would in the future be found to result much more frequently from such accidents than is at present the case. 5. Cases of so-called "railway spine"—cases of traumatic neurosis—due to railway accidents and injuries. The symptoms which these cases presented were, as everybody knew, numerous and various. Many of them were clearly due to derangement of the functions of the brain rather than of the spinal cord. By the public and the lawyers these cases were not unfrequently termed cases of "railway spine." Scientifically and medically they were best, he thought, termed cases of "traumatic neurosis," due to railway accidents and injuries. Before describing the symptoms which these cases presented in detail he distinctly and emphatically stated that he referred to the ordinary common typical cases in which nervous symptoms are developed after railway accidents and injuries. He did not refer to cases which were included in the first, second and third groups, or to cases in which there was localised paralysis due to injury of one or more of the peripheral nerves. Cases of this kind did, no doubt, occasionally occur after railway accidents and injuries; but like the unmistakable organic lesions of the spinal cord they were very rare. The traumatic neuroses were, however, extremely common after railway accidents and injuries, whilst after ordinary injuries they were, comparatively speaking, rare; and, as he had already stated, they seemed to occur very rarely in colliers whose spinal cords had been concussed by falls of coal on the back. He then enumerated the more common and characteristic symptoms which patients who have been injured in railway collisions complain of, referring especially to those cases in which the symptoms are apparently genuine and in which the patients appear really to suffer and were not intentionally exaggerating or malingering. The symptoms characteristic of this group of cases were, he stated, for the most part entirely subjective; definite and distinct indications of organic disease in the brain or spinal cord were extremely rare. The mode of onset, progress and development of the symptoms varied in different cases. In some there was evidence of definite local injury to the back, head, or limbs immediately after the accident or in the earlier stages of the case; in others the patient had merely received a general shake, and there was no evidence of local bruising or local injury. The disproportion between the local injury received at the time of the accident and the severity and persistence of the subsequent symptoms were highly characteristic and noteworthy. It was also remarkable that the symptoms which he had just described occurred comparatively seldom in railway *employés*, guards &c., who had been injured in railway accidents; and that passengers who had sustained severe local injuries, such as fractures of the leg, were much less likely to suffer from them than persons who had been merely shaken and who were apparently much less severely hurt. The exact pathology of the cases which were included in the fifth group had given rise to a great deal of disscussion and debate. As every one knew, two very different views were held regarding them. One was that the symptoms were the result of concussion of the spinal cord and of subsequent organic disease in the spinal cord and the membranes of the spinal cord and brain; the other was that the symptoms were due to a functional disturbance in the nervous system—that they were, in short, indicative of a traumatic neurosis. In Dr. Bramwell's opinion there could be no question that the latter view was the correct one. As far as his experience and observation enabled him to judge, the nervous symptoms which were developed after railway accidents and injuries were due to functional disturbance and not to organic disease in the vast majority of cases. The nature of the symptoms, their mode of development, and the progress and course of the case were altogether opposed to the view that they depended upon spinal meningitis, meningo-myelitis, or cerebral meningitis—the organic lesions of the spinal cord and brain to which they had been ascribed. He then detailed a number of facts which seemed to him to be opposed to the view that the symptoms were due to organic disease. He considered the course which most of these cases of so-called "railway spine" take. Whilst strongly dissenting from the view that the symptoms were due to organic disease of the spinal cord, the membranes of the spinal cord or the membranes of the brain, he was quite prepared to allow that in many cases recovery was slow and difficult. The future progress and course in cases of this kind were, in fact, variable. In almost all cases the symptoms persisted and became worse rather than better so long as the anxiety and worry attending litigation were hanging over the head of the patient. This was, of course, only what was to be expected. After the case was settled some patients got quickly well, but in others recovery was slow. In the great majority of cases recovery did, however, ultimately take place. This was more particularly the case when the patient was young and strong. In old, weakly and debilitated subjects, in those persons who had little or no reserve of nervous energy, the severe shock (to speak popularly) which the nervous system had received, and the prolonged suffering which the patients had gone through, might have so shattered their nerve tone that they never completely regained their former strength and activity. Even in these, the most unpromising cases, a very considerable degree of improvement usually did take place. In the cases to which he was referring (those included in the fifth group) permanent paralyses or other evidences of incurable organic disease either in the brain or spinal cord, were, so far as his experience enabled him to judge, very rarely if ever developed. In judging of the probability of recovery in each particular case the personal equation had to be taken into account. It was impossible to lay down any general rule which would apply to all cases as each case had to be judged on its own individual merits. In conclusion, he refered to the value of electricity and other special methods of investigation in cases of so-called "railway spine." It was only, he said, in a few cases that the electrical examination afforded positive results; and the difficulties attending the investigations were so great and the fallacies so numerous that no importance could be attached to the results unless the examination had been conducted by a skilled observer accustomed to the use of electricity as a diagnostic agent.

The PRESIDENT having thanked Dr. Bramwell for his excellent and valuable address, an interesting discussion ensued, in which the following took part: Dr. Brookhouse, Dr. Robertson, Professor Clifford Allbutt, Dr. Buzzard, Dr. Gordon, Mr. Chauncey Puzey, Dr. Eddison, Dr. Saundby, Dr. Barnes, Mr. Noble Smith and Dr. Walker. The views of Dr. Bramwell were generally endorsed by the various speakers. Dr. BRAMWELL replied. A resolution to the effect that in all cases of legal actions arising out of personal injuries a consultation between the medical men engaged on both sides should be held apart from all other persons was proposed by Professor CLIFFORD ALLBUTT, seconded by Dr. EDDISON, and passed unanimously. A committee, consisting of Dr. Ord, Dr. Bramwell, Professor Clifford Allbutt, Dr. Limont and Dr. Lindsay was appointed to take further steps to urge the adoption of this resolution upon the profession.

On the motion of Dr. DRYSDALE, seconded by Dr. EDDISON, a hearty vote of thanks was passed to Dr. Ord for his unremitting attention to the work of the section. Dr. ORD having acknowledged the compliment, the work of the section concluded.

## SURGERY.

### THURSDAY, AUG. 3RD.

*Surgical Treatment of Cerebral Tumours.*

Professor VICTOR HORSLEY, in opening a discussion on the above subject, said that he intended to speak from three points of view: first, the treatment of the patient previously to consultation with a view to surgical interference; secondly, the objects for which surgical interference should be undertaken; and thirdly, some fresh points in the technique of operation. In many cases there was great obscurity and the existence of a cerebral tumour was overlooked; in other cases there were grounds for suspecting the presence of a tumour, and the question arose, What constitutes a suspicious case? No one would operate on any case unless there was reasonable localisation of symptoms. Such symptoms might be divided, upon the plan of Dr. Jackson, into those of overaction, such as contraction of muscles, exaltation or perversion of sensation and want of action such as progressive motor and sensory paralysis. Three symptoms had been called cardinal symptoms—viz., optic neuritis, headache and vomiting; but one or more of these cardinal symptoms might be absent and the surgeon must not wait for them before operating. The leading feature for guidance in any case he considered to be the progressive character of the symptoms. The first point was as to how long it was justifiable to continue treating medically a suspicious case. The appeal to surgery was generally made when there was no hope of benefit. He ventured to state that the treatment by drugs should not be prolonged beyond six weeks unless a most remarkable and striking improvement in the symptoms had occurred. Starr in his "Brain Surgery" had fixed the period at three months. This was most important, for on all sides it was admitted that there was no single kind of cerebral tumour which was in the least degree curable by drugs, except perhaps a gumma or tuberculous nodule. At the same time the treatment by iodide of potassium would cause an abatement of symptoms in glioma. This partial improvement had led to errors in diagnosis and was no index to the nature of the case. Again, cases of tuberculous nodules might undergo retrogression, but the optic neuritis would destroy sight. He wished to protest against the system of turning to surgical treatment as a last resort instead of employing it as a primary means. He instanced a case of cerebral tumour causing extremely localised Jacksonian epilepsy, in which the symptoms had lasted for six years, and which might have recovered if it had been operated upon at an earlier date. With regard to the second point the objects of surgical interference were the removal and cure of the neoplasm. Glioma and gliosarcoma were distinguished by their liability to recurrence. In advanced cases he had frequently to decline to operate; in other cases the patient went on for several months and then the tumour recurred. The cases ought to be approached primarily and till this was generally done no conclusion could be drawn. It was, however, important to observe that it is possible to prolong life by removing the recurrences. The question also arose whether, if it was impossible to remove the tumour, the surgeon could not remove the most distressing symptoms. This question he could answer in the affirmative. The agonising headache could be removed by opening the skull and by the relief of cranial distension the optic atrophy and neuritis might disappear. Vomiting would cease with the headache. Convulsions might be mitigated, but the operation might produce loss of power; this, however, would be more than counterbalanced by the advantages mentioned. He related a case which—having been operated on once, being followed by relief and striking improvement—was operated on again when the symptoms recurred, and another case in which a malignant tumour underwent degeneration. The third division of the subject concerned certain fresh points in the technique of the operation. The first point was the best method of opening the skull. It had been observed that where positive cranial tension already existed the mere pressure of the trephine might produce immediate failure of the heart's action. It was, therefore, important to remove bone without pressure, and this could be done by a saw acting at a great pace. The circular saw he had given up, and he showed a linear cutting instrument made for him by Mr. Hawksley. There was one drawback to it in the production of vibration owing to the velocity. Secondly, he objected to the osteoplastic method of raising a flap of bone. It was not a good method in the interests of the patient. From close observation both in the adult and the child he was sure that the pericranium had no osteogenic power and that consequently it was a matter of no moment whether it was retained in contact with the bone or not. In cases where the dura mater had been affected it had to be cut away and it was not possible to replace the bone. He would note that where the bone was to be replaced the practice of the American surgeons of returning large portions of it should be followed and that it should not be cut into small pieces. A third point was that in certain cases tamponing the wound in the brain, as recommended by Bergmann, might be of great service. He adduced a case which proved fatal after the successful removal of the tumour. Chloroform vomiting caused hæmorrhage, which broke through into the lateral ventricle in consequence of the thinness and softness of the brain substance intervening between the bed of the tumour and the ventricle. The blood descended from the lateral to the third and fourth ventricles and destroyed life by pressing on the vital centres. A fourth point was that fatal shock might be prevented by dividing the operation into two stages, the bone being removed at one operation, and at a second one, performed after a few days' interval, the dura mater could be opened and the tumour removed. He hoped that the discussion would make it clear that the subject of surgical treatment must be approached with a determination to formulate for suspicious cases a definite line of action and that the expectant treatment was so fraught with danger to the patient that only after a relatively brief course of treatment by drugs ought the aid of surgery to be sought. The paper was illustrated by lantern photographs and specimens.

Professor MACEWEN said that he was not present at the early portion of Mr. Horsley's paper, having come into the Section when Mr. Horsley was dealing with palliative treatment of the cerebellum. Regarding the great advantage to be derived from such operations he thoroughly agreed with him. The two areas of the cerebellum had been freely exposed by him with the greatest relief—absolutely regarding the pain and to a great extent the paralysis. In one instance the patient had motor paralysis of the limbs—absolute in the lower limbs and partial in the upper limbs—including incontinence of urine and fæces, and this patient was completely relieved of both these affections. He was kept under observation for from six to eight months and he was able to go about and enjoy life, but at the end of that period he contracted acute tuberculosis of the lungs, of which he died. The other patient was relieved, but not to such a great extent. The headaches, however, had entirely disappeared—and for this reason alone the operation would have been justifiable—and the paralysis was to a very great extent also relieved. He was glad to find that Mr. Horsley admitted that the bone of the skull did not grow from the pericranium nor yet from the dura mater, but from the bone itself. If Mr. Horsley would go a step further and state that the periosteum of all bones was not a producer of bone he would be equally pleased; however, he said, this was foreign to the subject and had only been suggested by Mr. Horsley's remarks. As a rule, with regard to reimplantation of bone, he reimplanted the whole bone if it was from a young subject; but if from an older person the bone required to be detached into smaller portions, as if one part was not well nourished grave mischief resulted in attempting to remove the necrosed part. He also referred to the mode of folding back a lid of scalp and bone, detached by dividing three sides of the square completely, and then by perforating the base by a sufficient number of apertures or by introducing a saw between the scalp and the bone at the basal part and making a deep furrow and then folding it back like a hinge. He had found that palliative operations were of very great service, and especially when they were done in two stages by opening first the skull and the mucous membrane and then exposing the bone and leaving it, until it became soldered. He did so for the same reason as Mr. Horsley did—to avoid shock, and also for another and perhaps more important one—viz., to prevent the blood escaping into the subdural space and so inducing fatal results. This could not happen if the periphery was soldered. There was another very interesting point which he had found, and that was

that sometimes when the tumour was small there was an extravasation of the tumour itself through the opening; thus the pulsations of the brain completed the second part of the operation without further surgical interference.

Mr. DAMER HARRISSON had treated one case which was successful so far as the operation was concerned, and asked for information concerning the best method of dealing with hæmorrhage and damaged brain substance.

Mr. RUSHTON PARKER referred to a case under his care. A man who had been under medical observation for some time for headache passed into hebetude and paralysis of motion and sensation. A puffy tumour appeared on the scalp. On removing bone pachymeningitis was found and a hard tumour, which proved to be a gumma, lay under the dura mater. It was like an egg in a custard pudding, so soft was the brain substance around it. This case was drained and the disadvantage of drainage was shown, as it led to the necessity of removing more brain substance and the formation of a cerebral hernia. The patient recovered with a permanent degree of motor and sensory paralysis. He considered it best to close the wound entirely.

Dr. LANZ observed that drainage of the ventricle had been carried out successfully by Professor Kocher in cases of pressure.

The succeeding speakers were Dr. Nicholson (who asked for information as to the arrest of hæmorrhage), Dr. Bramwell (who had seen a case of puffy tumour in connexion with a gummatous affection of the dura mater), Dr. Hind, Mr. Godlee, Dr. Cathcart and Dr. Newman.

Professor VICTOR HORSLEY, in reply, vindicated the saws he employed and laid no stress upon hæmorrhage into the subdural space. Hæmorrhage caused by the surgeon was stopped by ligature of vessels and hæmorrhage from injury could be arrested by exposure of the damaged part and ligature. Pressure sufficed in some cases. The damaged brain might be removed, but it should be washed away by a gentle stream of warm antiseptic fluid.

*The Vertical Footpiece.*

Mr. W. ARBUTHNOT LANE read a paper on the Fallacy of the Vertical Footpiece. He said that it was curious that for such a number of years surgeons had thought fit to put up fractures of the lower extremities in splints with footpieces so placed in a vertical transverse plane that the inner margin of the foot when attached to it was vertical. To prove the fallacy of this method he first pointed out that in lying on the back in an attitude of rest the thighs roll outwards until the movement is stopped by the oblique fibres of the capsule of the hip-joint. The amount of rotation is such that the inner margins of the feet include between them an angle of 90°, each margin forming with the vertical an angle of 45°. He then adduced successive instances of solution of continuity of the segments of the lower limb experimentally, as, for instance, by dividing (1) the neck of the femur, (2) the shaft of the femur and (3) the tibia and fibula, and by excising the knee and erasing the ankle-joints with division of tendons. If in each of these conditions the lower segment of the limb be rotated inwards a faulty position of the limb is the result, separation of the cut surfaces of bone, shortening and deformity. In practice some of the deformity which ought to result from the vertical footpiece is sometimes obviated, partly by the foot slipping away from the vertical position, and partly in some cases by the outward rotation of the upper segment of the limb being limited to some extent by the leg being slung in the case of fractures of the tibia and fibula, and in fractures through the shaft of the femur to the upper part of the limb being fixed more or less firmly by bandages &c. to the splint. In such cases a fairly good result is obtained in spite of the vertical footpiece. Bony or dense fibrous union of intracapsular fractures would be more frequent if surgeons recognised the principles which should guide them in treating these fractures, for in the case of the young subject, where intracapsular fracture takes place through the growing line, by retaining the bones in proper position a good bony union can be obtained.

*Angular Gouge.*

Mr. LANE showed an Angular Gouge made for him by Messrs. Down Brothers, by which he was able to remove areas of bone of any form without injury to the dura mater and with great rapidity,

*Tapping in Hydrocephalus.*

Dr. J. HERN read a paper on the Effect of repeated Tappings in Hydrocephalus. He had had six cases; one was tapped eighteen times. Five out of the six cases had improved, and two out of the five had almost outgrown their hydrocephalus. The best of the cases was exhibited. The tappings were performed aseptically, a few ounces being drawn off at a time; the wound was sealed afterwards with collodion.

Mr. LANE, whilst congratulating Dr. Hern on his success, said he had had bad results himself. He thought that successes must be rare.

Mr. GODLEE thought that the remedy had been abandoned. He could not say whether the success in these cases would prompt them to take up the treatment again.

*Gastro-intestinal Surgery.*

Mr. RUTHERFORD MORISON showed some specimens illustrating intestinal surgery. He had had three cases of gastro-enterostomy and one of pylorectomy and gastro-enterostomy. 1. The first specimen was taken from a case of pylorectomy and gastro-enterostomy. The patient was a feeble old man, who died on the fifth day from sudden cardiac failure. Dyspnœa supervened and he fell back dead. 2. The second specimen was taken from a case of gastro-enterostomy performed four months before the patient's death for cancer of the pylorus. The pyloric mass was very extensive and the gastric symptoms very urgent. The operation proved markedly beneficial, the patient after recovery being able to partake of beefsteak and porter. 3. The third specimen of gastro-enterostomy showed great contraction of the opening. It illustrated the importance of making a large aperture of communication in these cases. 4. The fourth specimen was from a case where there had been symptoms of gastric ulcer. The stomach was greatly dilated. The patient suffered great pain and was quite unable to do anything. After operation regurgitation and vomiting supervened till the patient died. Mr. Morison mentioned another case in which a similar result followed. When the stomach was able to contract vomiting did not occur in these cases.

*A New and Easy Method of Resection.*

Mr. MORISON showed an instrument by which he was enabled to perform resection in cases of tumour and gangrene of the bowel in about ten minutes on the dead subject. He had not yet been able to apply it in practice.

## FRIDAY, AUG. 4TH.

*Intestinal Obstruction.*

Mr. F. PAGE opened a discussion on Intestinal Obstruction. He said that few cases give rise to more difficulty and doubt in practice than cases of intestinal obstruction, and by acute intestinal obstruction he meant a "total arrest of the passage of fæces and flatus." These are symptoms of a great variety of conditions all of which imperil life and the difficulty in treatment arises from the doubt as to the cause of the obstruction. In a strangulated hernia the treatment is obvious. The attempt is made to liberate the imprisoned gut by taxis—first without and then with the aid of chloroform, and, failing taxis, the stricture is at once cut down upon and the bowel liberated. Herniotomy is successful in proportion to its early performance, and it would not be denied that grave mischief is frequently done by taxis. When no hernia can be found the cause of the obstruction must be within the cavity of the abdomen, and the treatment must be similar. Unfortunately it is not always possible to ascertain whether the symptoms are due to strangulation—they might be due either to one of the various mechanical conditions which are known to cause obstruction or to an acute inflammatory process, such as suppurating gall-bladder, peritonitis or typhlitis. To treat an acute inflammatory attack by abdominal taxis and repeated injections of air or fluid would lead to disaster. Mechanical obstruction and perforation are best treated by abdominal section and it is generally impossible to determine what is the cause of a peritonitis, or what is the nature of the obstruction, without opening the abdomen. Why should not the abdomen be opened for the purpose of ascertaining the cause of the symptoms and if possible removing it? Exploration at the present day cannot be said to add materially to the danger, and it may and probably would reveal the nature of the disease. It is true that in a small proportion of cases recovery takes place without operation and that the mortality in cases of abdominal section for the relief of strangulation is at present very high. The mortality from herniotomy used to be high from the same cause—viz., delay. In both classes of case the earlier the operation the better the chance of success. He wished to urge the necessity, after a careful examination of the abdomen under chloro-

form has failed to relieve the patient, to at once explore the abdomen by means of an incision. What is the alternative? Delay, opium and belladonna, copious and often repeated injections, inversion, abdominal taxis under chloroform, shaking the patient and inflation. In few of the known causes of intestinal obstruction could these means possibly be successful. In some cases they would do harm and would diminish the chances of success from operative interference. In the more acute cases the indication is to open the abdomen at a very early period; in more chronic cases other measures may be adopted, whilst in an intermediate subacute class it is most difficult to determine what shall be done. The best guide to treatment is the effect the disease is having upon the patient. If the symptoms, which should be narrowly watched, indicate that the vital powers are threatening to fail, then, though the symptoms themselves may not be very severe, operative interference should be resorted to, and where the question as to the propriety of opening the abdomen or waiting is pretty evenly balanced it is better to operate.

Mr. HUTCHINSON spoke in favour of taxis in herria and intestinal obstruction. He always took great pains to reduce cases of strangulated hernia by taxis. Occasionally a death might take place after reduction, but recovery was the rule. Operation was attended by risk, and the laying open of the sac in an inguinal hernia was attended by special risk, and there always would be a risk whatever improvements might be made in surgery. No fair comparison could be made between herniotomy with opening the sac and opening the peritoneum in a healthy state. We should only mislead ourselves if we applied our experience in one set of cases to others of a totally different character. The inflamed sac of an inguinal hernia could not be laid open with impunity. In advocating the reduction by taxis he was not apologising for delay. The patient application of the taxis was very different from delay and if he applied ice he waited to see the effect. He might be asked if he used forcible taxis. He did; he used as much as his fingers permitted, but he used it carefully, steadying the neck of the sac until his hands were tired. He had then asked another surgeon to continue taxis, and he had gone on tiring the hands of his surgical colleagues and had reduced the hernia at last. He could quote many individual cases, but he would only mention one which bore out his views as to opening the sac. In a case of hernia strangulated for six hours after the failure of taxis herniotomy was performed and the sac was opened. There was no condition of intestine which should have rendered the result fatal yet the man died of peritonitis, no doubt in connexion with the operation. He had read all the published cases of intestinal obstruction, he had conversed with every surgeon he met as to his experience and results and he avowed his preference for abdominal taxis. A large measure of success had attended this treatment. Acute intestinal obstruction could not be defined and he took exception to Mr. Page's definition of it. There was no one lesion which could be associated with any definite symptoms, and though there were a few cases in which operation might be necessary yet they were so mixed in their symptoms, and they were so indistinguishable, that he thought it was wise to let the few cases go. The risk was far greater if the abdomen was opened. His point was to try abdominal taxis thoroughly, and he could mention a dozen cases in which success followed this method of treatment. It had been said that he advocated massage and tossing the patient in a blanket. His plan was to give chloroform, to hold the patient up by his legs and shake him, to give him enemata and to push the intestines from side to side very vigorously. This was done successfully in the case of a professional friend who had an attack of acute pain and vomiting and had had complete obstruction for thirty-six hours; also in the case of a schoolboy, and he could mention case after case where an equally satisfactory result was obtained. He disputed Mr. Page's dictum that there were few abdominal conditions which are capable of relief by taxis; there were many cases, whether of band or twist, in which reduction might be easy and where the bowel might be replaced by moving the intestines in the abdomen. Then the fatality of the operation must be considered. He would take the London Hospital because he was better acquainted with the practice there, and though there were surgeons there who advocated abdominal section in intestinal obstruction, he did not know of more than a single case in which operation had been successful. In fact, the risk was very great and the ratio of success very small. He then referred to obstruction by gall-stones and said he would defy a surgeon to diagnose obstruction by gall-stones. When gall-stones were found they were generally found unexpectedly, and in many cases the patients came almost to death's door and were then suddenly relieved by the gall-stones slipping through. The question arose, what should be done if abdominal taxis failed. Should the abdomen be opened? He confessed that he considered the patient would generally have a better chance of recovery from waiting than from submitting to abdominal section.

Dr. HUME admitted that the results of operation had hitherto been unsatisfactory. Prolonged taxis, however, was very injurious and prejudiced the future result. There was the one great drawback to success, they did not know for what condition they were operating. It was most important to form a correct diagnosis.

Dr. WARD COUSINS could recall three cases of reduction by taxis, all of them in young subjects. One case was followed by an immense escape of imprisoned gas. The abdomen should not be opened too frequently or in too great a hurry. A correct diagnosis should be aimed at, but there was not a single symptom or group of symptoms on which surgeons could rely. Perforation of intestine simulated obstruction.

Dr. TYSON said that the prognosis of herniotomy etc. in London hospitals was not to be compared with the prognosis in the provinces or in private practice as the cases were not seen from the first. The surgeon ought not to wait for collapse before interfering.

Mr. MORISON objected to Mr. Hutchinson's doctrines and practice in reference to taxis. He did not attempt to do taxis, but practised immediate herniotomy. Of 100 cases of herniotomy only one died of peritonitis; in no other case had the patient died of the operation. Taxis was answerable for a fatal result in cases of reduction *en bloc*. The cases that recovered spontaneously from obstruction were those which were left alone or treated by Thomas's method, washing out the stomach with opium and enemata. Did any surgeon know of a case of recovery after twenty-four hours' fæcal vomiting and meteorismus?

Dr. WILKINSON inquired whether there were any cases in which the patient had recovered from intestinal obstruction after the surgeon had considered the case to be hopeless.

Mr. RIVINGTON said that, whilst he agreed with much that Mr. Hutchinson had said in reference to the benefit that was to be derived from abdominal taxis in cases of intestinal obstruction, he thought that he altogether undervalued the operation of abdominal section in these cases. Mr. Hutchinson had compared—unfavourably to operation—the results which he had obtained from abdominal taxis with the results from abdominal section, and he had stated that at the London Hospital there had not been a recovery from abdominal section except in a single case of strangulation by a band. The fact was that the operations had not succeeded because most of them had been undertaken too late. Cases of intestinal obstruction often did not come under the surgeon's care until the time had passed when a successful issue might have been expected from operation. He fully recognised the value of manipulation and had relieved several cases by kneading the abdomen under chloroform and by enemata. What was wanted was to combine the advantages to be derived from abdominal taxis with those to be obtained from operation. Operation ought to be performed early—say within the first twenty-four hours. If taxis and enemata failed the surgeon should proceed to operate without delay, for if the patients were left alone they would almost certainly die. When a number of cases of operation within twenty-four hours had been put on record it would be fair to compare the results with those obtained by abdominal taxis and delay. At present the comparison was misplaced. Disappointing as had been the results of operations hitherto under the conditions in which they had been performed, he believed that if a series of cases of early operation was undertaken the result would be a fresh triumph for operative surgery.

Mr. HASLAM thought that Mr. Hutchinson's observations were worthy of great consideration. He would like to know whether any bad results had followed abdominal manipulation. Operation, to be successful, should be done early and should not be delayed.

Dr. NEWMAN said that two years ago in Glasgow there was a similar discussion with equal diversity of opinion, but the conclusion arrived at was that patients with intestinal obstruction should be admitted into the surgical wards. He had made many necropsies as pathologist for ten years and had never met with a case in which the operation had caused the

death of the patient. The abdomen might be safely opened to make a diagnosis and the advantages of early operation were shown well in reference to the surgery of the kidney. His experience at the post-mortem table was that more cases died from want of operation than from the operation itself.

A Member of the Association, in reply to Mr. Hutchinson, mentioned a case in which obstruction from gall-stones had been diagnosed and relieved by operation, though the patient died.

Mr. PAGE, in reply, said that he considered the proposition that each case must be tried on its own merits had been established and that no dogmatic treatment could be formulated. He disagreed with Dr. Tyson that cases of obstruction belonged to the physician. The weak point, from a surgical point of view, was the unfavourable results of operation, but though these results had not been satisfactory they would not always remain so.

## OBSTETRIC MEDICINE AND GYNÆCOLOGY.

*Puerperal Septicæmia.*

Dr. ROBERT BARNES, in opening the discussion on Puerperal Septicæmia, said: "If we adopt the exact etymological meaning of the terms we, of course, understand by septicæmia empoisonment of the blood by putrid or decomposing animal matter, whilst by pyæmia we understand empoisonment of the blood by pus. And here we have to face a difficulty frequently met with when we attempt to frame a rigid definition of a pathological state. Can we declare that either putrid matter or pus ever forms in the parturient canal without the intrusion of air or unless it is excited by other matter from without? There is no such thing as simple puerperal septicæmia or pyæmia. It is far more philosophical and practical to use a general term such as 'puerperal pyrexia' or 'fever in a lying-in woman,' which includes other forms of blood disorder, which commits us to no absolute theory, but which indicates resort to clinical and pathological analysis. Wherever medical authority and skill have had free action the mortality in childbirth has been reduced almost to the minimum; but wherever this authority has not prevailed excessive mortality in childbirth still prevails. Dr. Boxall,[1] bringing the figures of the Registrar-General down to the latest date, has confirmed what was already known—namely, that the death-rate from childbirth in England and Wales has not appreciably diminished and that puerperal fever has increased in the provinces, whilst in lying-in hospitals the success in preventing septicæmia has been so striking as to establish beyond a doubt that childbirth fever is amongst the most preventable of diseases. It was stated, in evidence recently given before the Select Committee of the House of Commons on the Registration of Midwives, that in a population of 13,000 there were thirty-two victims to puerperal fever in five years and that this calamity was due to the practice of unskilled and careless midwives. The lesson to be drawn from this contrast is clear and absolute. I still think that the most rational and useful division of the causes of puerperal fever is—(1) those causes which arise in the subject herself which are essentially the product of the puerperal process and (2) those causes which arise externally to the patient, but which are inoculated or engrafted upon her. The matter which is perhaps the first to be drawn into the circulation after labour is the fluid exudations, mostly serum. The second matter absorbed is Virchow's 'physiological fat,' the proceeds of the fatty liquefaction of the then superfluous tissues. Then there is the lochial discharge, which lies free in the cavity of the uterus and vagina. Now suppose that these healthy processes are checked. The retained matter, missing its proper metabolic changes, undergoes other changes of a noxious character, engendering fever and producing the simplest type of endogenetic septicæmia. Another form of endogenetic septicæmia arises when the lochial discharge, unduly retained in the parturient canal, undergoes putrefactive change and is then absorbed. This form is closely allied to and easily merges into the second form. By recognising these causes much will be done in guarding the patient against the invasion of the exogenetic causes. In order to obviate these, let us begin by inquiring how the first, the most comprehensive antiseptic, is the rational conduct of labour. The whole process should be complete. Failure or disorder at any stage entails the danger of perversion of the physiological order of progression. The vascular system, including the structure of the heart and vessels and the quality of the blood and secretions, is deranged. In the right balance of functions lies the safeguard against most forms of autogenetic puerperal fever. In this lies the explanation why hard-working women, whose glandular system is highly developed, pass through trials which crush the delicate, pampered daughter of Plutus. Many women of this class, we all know, are unable to complete the allotted task—they may survive the stage of gestation and break down under the trial of labour; others may struggle through labour and puerpery, but are unequal to the duty of lactation. It is in this class that we find the most numerous victims of endogenetic puerperal fever. On the other hand, I believe that women of the working classes are more especially exposed to the invasion of exogenetic ills; and this may explain to some extent the persistent mortality in childbirth in the provinces; and this again has its relation to the reduced mortality of lying-in hospitals, where the majority of the patients belong to the working classes. If we set aside the exceptional contingent of single women primipara hospital patients are comparatively safe from endogenetic disease. It is certain that the hospital mortality is mainly due to infection from without. To safeguard the puerpera from endogenetic mischief:—1. Avoid 'meddlesome midwifery' and avoid the tampon or plugging. 2. Labour involves traumatism. The bared surface left by detachment of the placenta, bruising laceration of the cervical canal and vagina, and laceration of the perineum are wounds, and are open gates for the entrance of foul matter from the parturient canal—that is, open wounds exposed to air and not allowed to heal are liable to suppurate, hence pyæmia. We cannot altogether close the uterine wound, but I insist that the lacerated perineum should be stitched up at once or within twenty-four hours. The traumatic surface of the uterus may be practically closed by ensuring contraction of that organ. During and after the expulsive stage the uterus shou'd be compressed, and pressure must be maintained by careful abdominal bandaging. Again, when the uterus becomes flaccid its cavity enlarges and, falling back and upwards into the abdomen, shrinking from the pelvis, a vacuum is created, producing suction, not alone of foul matter in the vagina, but also of foul air and other matter from without; and air may be drawn into the open mouths of the veins, thus causing sudden death. 3. Having shut the gates as far as possible against poison take care to remove actual or potential poison. Cleanliness will do this. One rule is to preserve the dorsal decubitus with the head and shoulders somewhat raised. This helps drainage, blood and secretions flowing out, and this position also impedes suction. Then there is the question of injection and irrigation. Here we touch on the dangerous border-land of 'meddlesome midwifery.' I am persuaded that as a general rule irrigation is better avoided. Of course there are exceptions, as after hæmorrhage or where clots accumulate. 4. The placenta should be examined and the antiseptic diaper should be used. 5. Another safeguard upon which I have long insisted is the administration of oxytocics, if I may so call them, after labour. Quinine, ergot and hamamelis in moderate doses three or four hours after labour have an excellent effect, not alone as general tonics, but in maintaining steady contraction of the uterus. 6. There is a condition of the lying-in woman which is the main factor in the production of septicæmia. This lies in the sudden transition from evolution to involution or regression. A sudden increase of the force of absorption takes place. The thirsty circulatory system may be said to "suck in" all superfluous material, but we must never forget that the absorptive energy developed does not always end with the sucking in of effete matter, and that metabolism and elimination must keep pace with absorption. If the due balance is not maintained the blood becomes loaded with effete matter and thus retained undergoes unknown changes; whereas in the endogenetic form the poison is formed in the system or absorbed from the genital tract in the exogenetic forms we have superadded, one or more of a multitude of poisons, some of which may be absorbed from the genital tract, having been carried there by the obstetric hand or instruments, or some of which may enter by the lungs, the skin or the stomach. It may be stated broadly that the prevention of zymotic infection falls within the province of general hygiene, the medical practitioner to avoid attending a case of labour within a short time of visiting a patient suffering from a zymotic disease. Amongst the precautions to be taken I may be permitted to urge that the nurse should be made to take an open-air bath during two or three hours a day. It is a wise thing for himself as well as for his patients for the medical

[1] THE LANCET, July 1st, 1893.

man to ride on horseback or on a bicycle or in an open carriage, and not to wear gloves. In discussing the question of the origin and treatment of puerperal septicæmia he ought not to omit the influence of meteorological conditions. One condition of the atmosphere which is especially efficient in the production of endogenetic fever is dampness or the saturation of the air with water. Under this condition pulmonary exhalation is seriously impeded. Again, sunshine and light favour the respiratory work. In addition to the ordinary zymotic poison we must not forget the cadaveric poison which originates in the dead body. The puerperal state may be in some respects compared with scurvy. In both the blood is degraded, charged with matter that ought to be eliminated and is poor in red globules. The diet should be milk, minced raw beef or good beef-tea fresh made, a little wine, claret or Burgundy and an easily assimilable form of iron. Of all agents for antisepsis I believe the best is atomised carbolic acid. This is used during and not after labour. I believe there is a virtue in this atomisation of carbolic acid apart from that of sterilising the germs in the air. Inhaled and then absorbed into the blood, it acts as an antidote or correction to any poison that may be developed in or have been introduced into the system. The antiseptic agents of which we have most experience are carbolic acid, iodine, chlorine, sulphur and mercury. The bichloride of mercury, so much extolled by Farmer and which has given him and others such brilliant results, has also its dangers. Turpentine, an old-fashioned remedy, as an intra-vaginal or rectal injection is, I believe, fairly safe. Iodine is the most valuable antiseptic in the proportion of iodine 5 to water 1000."

Dr. JOHN HERN said that in the investigation into the causation, symptoms, progress &c. of this malady (or maladies) two sets of facts are required, clinical and bacteriological. He wished to add his mite by giving them the notes of three fatal cases which had unfortunately occurred in his practice He had always been careful to cleanse his hands, first with soap and water and a brush, then with methylated spirit and finally with a 1 in 20 solution of carbolic acid.

Dr. CULLINGWORTH referred to the as yet unsettled question of non-pathogenetic organisms in the parturient canal becoming pathogenetic. He directed attention to a valuable paper on the Bacteriology of Puerperal Septicæmia which appeared in the July number of the *American Journal of the Medical Sciences*, by Dr. W. Williams, of the Johns Hopkins Hospital, Baltimore. Dr. Cullingworth stated that the safest assumption to hold was that infection from without was the almost invariable cause of puerperal septicæmia. With regard to the methods of antiseptic midwifery, he emphasised the danger of using douches as a routine practice. Most cases of sublimate poisoning might easily be eliminated if we were careful in the use of douching, as no death from the internal administration of mercury had been recorded as a post-partum. The sublimate should always be used for the hands and instruments. Dr. Barnes had expressed the opinion that a code of instructions should be drawn up for the direction of midwifery practitioners. Such a code had been prepared by Drs. Williams, Champneys, Herman and himself in connexion with the General Lying-in Hospital, London.

Dr. SAMUEL SLOAN was glad to hear Dr. Barnes attach so much importance to the preparation of the woman for labour. He agreed also generally with Dr. Barnes' views on the subject under discussion. Regarding the question of antiseptic *versus* aseptic treatment, he would remind his English friends that by the time the former was in full swing in Scotland it was hardly recognised as of practical importance, at least in midwifery, in the south; and that by the time it was the rage in London it had given place in Scotland to asepticism. Indeed when some years ago, at the Obstetrical Society during a discussion on Dr. Boxall's paper on Mercurial Poisoning arising from Routine Irrigation during the Puerperium, he ventured to remark that he had then got beyond this practice he could get no one with the exception of Dr. Cullingworth to say a kind word for the "let-alone" principle in normal cases. Now even Dr. Boxall was inclined to condemn the practice. He related a case where, in his opinion, unfortunate midwifery practice was due largely to habitual inefficient hand cleansing, and said that, on the other hand, a medical man could go at once from the vaginal examination of a case of puerperal septicæmia to attend a lying-in woman with perfect safety to the latter if he took sufficient pains to render his hands &c. aseptic. No speaker had referred to the necessity for ensuring that the hands of the patient were rendered aseptic at the beginning of labour. He asked Dr. Barnes what he would do where the whole of the placenta and of the amnion had been expelled, but where the chorion was retained—a common but generally an unrecognised condition. His practice was not to introduce his hand into the uterus but simply to insert eucalyptus pessaries into the vagina night and morning. He also wished to know if Dr. Barnes had had any experience of dry eucalyptus in puerperal septicæmia.

Dr. BYERS said that they were specially entitled to thank Dr. Barnes for having prominently brought out the fact that whilst puerperal fever had been banished from lying-in hospitals it still prevailed in private practice. The lessons to be learned from this fact were that one should endeavour in private practice to follow out as a model the practice of the lying-in hospitals, modified according to the exigencies of each case. He spoke of the value of corrosive sublimate as an antiseptic and of local treatment and discussed the question of how a medical man was to act who was so unfortunate as to have a case of septicæmia after delivery. He thought that by thorough disinfection, change of clothes and careful use of antiseptic precautions a man under such circumstances might resume practice. As Esmarch had said, "Time did not destroy septic dirt."

### *Conservative Gynæcology.*

Professor POZZI opened a discussion on the Conservative Treatment of the Diseases of the Uterine Appendages. We regret that, although application was made to the secretary of the Section for the opportunity of making some extracts from Professor Pozzi's valuable paper, the facilities for doing so—which are usually granted to representatives of the Press—were not accorded. A discussion followed, of which we are enabled to give the following abridgement.

Dr. MORE MADDEN still held, as for many years he had also maintained in his previous communications on this subject—viz., at the Brighton meeting of the Association and at the Washington meeting of the International Medical Congress—that in the treatment of diseases directly affecting the uterine appendages, or immediately consequent thereon, the gynæcologist should set before himself not only the removal of disease, but also the restoration of the structural and functional integrity of the affected appendages, and that only when the latter is impracticable should he be contented with the former. Thus, for instance, the removal of the ovaries may be quite necessary in the treatment of rapidly growing hæmorrhagic uterine fibro-myoma, but it is not, generally speaking, necessary or justifiable under the circumstances, such as the neurotic cases, for which oöphorectomy was at one time regarded as a panacea. With regard to the removal of tubes and ovaries in tubal and other diseases, more especially in cases of hydro- and pyo-salpinx, he believed that in many instances at least it might be found possible by others, as it had been by himself, to cure such cases either by the cautious catheterisation of the Fallopian tubes or by tapping the cyst by the aspirator under antiseptic conditions. Resection of the tube or salpingotomy was not generally a feasible operation, and as to massage the impossibility of thus breaking down adhesions without great risk of at the same time rupturing the distended tube was too self-evident to need demonstration. Finally, Dr. More Madden urged the importance and value of medical and surgical conservative treatment in the cases under consideration.

Dr. SAMUEL SLOAN felt that it required some courage for one who acknowledged himself a gynæcological physician to speak on this subject before an audience of gynæcological surgeons; but he was glad to see that the pendulum had at least begun to swing back. He admitted that in cases of severe cystic disease and in purulent cases early surgical treatment was to be advocated; but he believed that more careful diagnosis and more efficient medical treatment would go far to limit the number of cases operated on. He detailed a case which occurred in his own practice in illustration of his contention.

Dr. ROBERT BELL said that although the paper of Professor Pozzi was entitled the "Conservative Treatment of Diseases of the Uterine Appendages," his remarks were confined to the surgical side of the question. He believed that in the majority of instances where disease of the appendages existed the pathological condition had its origin in disease of the endometrium, which had extended to the tubes, and then by retrograde absorption the ovaries became affected.

Dr. N. T. BREWIS said he felt greatly indebted to Professor

Pozzi for the lesson which he had given on the conservative treatment of disease of the uterine appendages. Doubtless such treatment is the ideal one wherever practicable. It is better surgery to repair the tissues than to remove them—it is better to preserve or restore than to destroy the functional integrity of the parts, provided that the measures adopted cure the symptoms. He was sure all were obliged to Professor Pozzi for describing his technique, which he had little doubt many would adopt and give a fair trial to. He thought that in addition to the cases mentioned by Professor Pozzi as suitable for conservative procedures there should be classed those instances of adherent appendages which were healthy in other respects. Dr. Brewis mentioned a case in which he returned the ovaries—which were in other respects healthy—into the abdomen after liberating them from surrounding adhesions. The operation was entirely successful. With regard to diagnosis, he was of opinion that it was impossible to make out the exact condition of the appendages without opening the abdomen, and he held that it was justifiable to do so in every case where the symptoms did not yield to palliative measures, and then to adopt conservative or radical treatment as was found necessary.

Dr. GALTON said that, speaking from the view of the general practitioner, he welcomed the paper of Professor Pozzi as calculated to limit the area of radical operations upon these organs. He gave the experience of many others in saying that he had seen many cases of typical symptoms of testes and ovary disease recover without operation, and having seen many special gynæcological operations become fashionable, then common and ultimately die out he was glad to see the signs of degeneration overtaking the prevalent one. From one remark in the course of the discussion he ventured to differ. Dr. Fancourt Barnes said that he was unwilling to interfere with strong adhesions. Now strong adhesions showed that the part to which they had formed was fixed and not movable, and therefore the stronger the adhesion was the greater the force that might be applied to separate it. He had acted on this principle on several occasions and once spent quite an hour searching for a torn vessel, but the cases did well.

Mr. JOHN W. TAYLOR (Birmingham) noticed that in some of Professor Pozzi's cases the operation of ignipuncture was associated with that of hysteropaxy. In these cases it must be very difficult or impossible to estimate whether any benefit derived is due to the puncture or the elevation of the ovary. Hysteropaxy and allied operations are often followed by great relief to ovarian pain, especially when the organ was previously prolapsed. A conservative operation of great practical utility was that of the enucleation of broad ligament cysts, not only when sessile but when contained in the full portion of the ligament. These were usually healed by removal of the tumour, together with its associated tube and ovary, but by enucleation the latter structure could be safely preserved.

Dr. CULLINGWORTH entirely agreed with Professor Pozzi that partial and so-called conservative operations on the Fallopian tubes were useless. In the case of the ovary conservative surgery was of much greater importance. It was very desirable that menstruation should, if possible, not be arrested after these operations, and by saving even a very small amount of ovarian tissue the function is generally preserved. The results of conservative surgery on the ovary have been much more successful than on the tube. Dr. Cullingworth approved of Professor Pozzi's suggestion to use ignipuncture. He also thought highly of the fixation of the fimbriated end of the tube to the ovary after it had been freed from abnormal adhesions.

Dr. HEYWOOD SMITH said that in his remarks he did not wish necessarily to be classed on the side of destructive treatment. He considered that a difference must be made between the rich and those who have to gain their living by work. He contended that if the second ovary was in an at all suspicious condition it should be removed rather than that the patient should be subjected to a subsequent operation. He advocated the use of the curette and preferred the dredge-curette to the ordinary spoon-shaped one. He had also found that the faradaic current was useful, but he thought that its effect was only temporary. He still thought that if the abdomen was once opened most women would prefer that all chance of the necessity of another operation should be avoided. He agreed with Professor Pozzi as to attempting replacement in the genu-pectoral position in the first instance without an anæsthetic, so that the force used should not be too severe. He also advocated the use in these cases of the tilted bed as a means of relief without any further treatment.

## PUBLIC MEDICINE.

The business of this Section was resumed in the Hall of the Geographical Society, St. Mary's-place. The chair was occupied by the President, Mr. H. E. ARMSTRONG (medical officer of health of Newcastle).

Dr. T. E. HILL (medical officer of health, Durham County Council) read a paper on Specific Throat Affections, and dealt chiefly with diphtheria and allied diseases. He spoke of its affinity to scarlet fever, and said that its infective power was becoming more generally recognised. He argued that the chief factor in the spread of the disease was school attendance.

Dr. SIDNEY DAVIES (medical officer of health, Plumstead) read a paper on the Causes of the Increase of Diphtheria in Urban Districts. He contended that the spread of the disease was mainly influenced, apart from infection, by insanitary conditions. The course of the disease in his district had followed the course of drain ventilators, but he thought the shafts, and not the ventilators, were to blame.

Dr. THRESH (medical officer of health, Essex County Council) agreed that school attendance was a fruitful source of dissemination of the disease.

Dr. NEWSHOLME (medical officer of health, Brighton) thought defective house drainage was the more probable cause of the disease.

Sir CHARLES CAMERON (medical officer of health, Dublin) had found that, as a rule, the air did not come out of the drain, but that early in the day the in-suction of the air was great.

Dr. Groves (medical officer of health, Isle of Wight), Brigade-Surgeon Pringle, Dr. Grant (medical officer of health, Inverness-shire), Dr. Mason (medical officer of health, Hull), Dr. Hill (medical officer of health, Birmingham), Dr. Malcomson (medical officer of health, Middlesbrough), and Mr. Eastes (London) also took part in the discussion.

Mr. C. G. RING (medical officer of health, Keswick) read a paper on the Prevention of the Spread of Infectious Diseases by Tramps. He stated that statistics supplied by Mr. Armstrong (the President) showed that of sixty-three urban districts invaded by small-pox thirty-seven were known to have been infected by tramps. He suggested that during an epidemic tramps should be compelled to carry a card with their names, place of issue and date clearly written, with blank spaces for endorsement.

Dr. JEPHSON (medical officer of health, Durham Rural Districts) considered revaccination the only means of preventing the disease. Dr. Robinson (Stanhope), Brigade-Surgeon Pringle, Dr. Malcomson (Middlesbrough) and Mr. Fowler (Epping) having taken part in the discussion, Dr. Fowler (Hull) gave some particulars of his experience during the great strike. As each contingent came into the town it was inspected. The first case of small-pox they found was that of a man who had come from Liverpool. Every person on board the ship on which he had travelled was revaccinated.

Dr. A. C. MUNRO (Renfrew County Council) read a paper on the Notification of Measles and moved a resolution that measles should be made a notifiable disease.—Surgeon-Colonel CUFFE seconded the resolution, which, after some discussion, was carried.

Dr. MALCOMSON exhibited and explained the plans of the new Floating Hospital of the Middlesbrough port sanitary authority.

## PSYCHOLOGY.

This Section reassembled in the Physical Theatre of the Durham College of Science, under the presidency of Dr. MCDOWALL.

Dr. YELLOWLEES introduced a discussion on State Aid for Poor Private Patients. He argued that the present treatment of poor private patients was entirely opposed to the enlightened humanity of the age. It should not be necessary for them to become pauperised. He stated that the system in the Scottish asylums was superior in this respect to that in England.

Dr. CLOUSTON expressed an opinion that the new Lunacy Act providing for the reception of patients in county asylums at low rates would tend to alleviate the present sad state of things.

Dr. MURRAY LINDSAY and Dr. RICHARDS also took part in the discussion, and Dr. YELLOWLEES replied.

Mr. IRELAND (Public Asylum, Berbice) opened an interesting discussion on Insanity from the use of Indian Hemp, and stated that in many of the Indian and other asylums 30 per cent. of the admissions were due to indulgence in hemp smoking. After describing the various forms of the narcotic, he proceeded also to describe the symptoms induced by the drug, and gave an account of a number of interesting cases.

Dr. MURRAY LINDSAY remarked that the paper showed that the abuse of the narcotic was almost confined to the male sex. This was not so in the cognate case of the abuse of alcohol.

Mr. Richards, Dr. Hack Tuke and Dr. Urquhart acknowledged the value of the paper, and Dr. CLOUSTON, in speaking of the influence of the personal equation, described the result of auto-experimentation on his own person.

Dr. CLOUSTON then introduced a discussion on the Attached Asylum Hospital, its Uses and Advantages, and remarked that it might be asked why the allotment of a separate ward within the general building might not serve the same purpose. He contended that the complete segregation of the detached building secured greater ease and efficiency for special hospital treatment.

Dr. WALLIS, in connexion with this discussion, exhibited plans of a new hospital for the Whittingham Asylum, Lancashire. He strongly advocated the system.

Dr. YELLOWLEES entirely concurred with Dr. Clouston's views.

Dr. HOWDEN described the building under his superintendence at Montrose and generally coincided with the views of previous speakers.

Mr. RICHARDS said that the difficulties of classification could not be entirely settled on the broad lines indicated.

Dr. URQUHART contributed observations based on his experience at Perth.

The PRESIDENT referred to cognate arrangements at the Morpeth Asylum and Dr. WALLIS replied.

Dr. GEORGE ROBERTSON read a paper on Massage of the Brain: a New Principle in Cerebral Therapeutics. His remarks were illustrated by diagrams showing the phenomena of brain pulsation and pressure.

Discussion on the paper was adjourned.

## PATHOLOGY.

This Section met in the Physical Theatre of the Durham College of Science, Dr. C. S. ROY presiding.

Dr. A. HAIG (London) read a paper on the Causation of Anæmia and the Blood Changes Produced by Uric Acid, in the course of which he stated that uric acid counteracted the action of iron.

Dr. G. A. GIBSON (Edinburgh) read a paper by Dr. ROBERT MUIR and himself on Atrophy of the Heart in Consequence of Obstruction of the Coronary Artery. In the specimen shown Dr. Muir had found that the most stenosed branch of the vessel corresponded with the most atrophied district.

Dr. A. G. AULD read a paper by himself and Professor COATS entitled a Preliminary Communication on the Pathology of Aneurysm and its Relations to Atheroma.

A discussion followed.

## OPHTHALMOLOGY.

This Section resumed its proceedings, Mr. G. E. WILLIAMSON being in the chair.

Dr. BERRY read a paper on the Innervation of the Ocular Muscles. His communication, he said, was an attempt to analyse, by the help of clinical experience, the nature of the innervation processes in the internal and external recti muscles. The conclusions at which he had arrived were that the different states of innervation in the several lateral muscles could be accounted for by the combined action of but two different impulses—the impulse to associated lateral movement and the impulse to convergence. The paper was closely reasoned and illustrated by numerous diagrams.

Brigade-Surgeon-Lieutenant-Colonel DRAKE-BROCKMAN then read a paper on Cases of Double Proptosis and described three cases which had come under his notice in Madras.

Dr. J. WARD COUSINS exhibited some new devices for the application of ophthalmic remedies and showed a new dial for testing colour vision.

Dr. STEPHENSON next read a paper on Congenital Ectropion of the Uvea. In concluding his remarks he stated his belief that ectropion of the uvea was a condition natural to the eye of the horse and allied animals, and when occurring in man was to be regarded as a reversion in type to the anatomical structure of vertebrates lower in the scale of creation.

Mr. R. LAWFORD KNAGGS read a communication illustrated by diagrams on Reflex Amblyopia during Pregnancy. He urged that diminishing acuteness of vision in such cases should be carefully watched and that if there was any fear of optic atrophy the pregnancy should be artificially terminated.

The Section then adjourned.

## DISEASES OF CHILDREN.

### *The Treatment of Scrofulous Neck.*

In this Section a most interesting discussion on the Treatment of Enlarged Cervical Glands (Scrofulous Neck), was opened by Professor CLIFFORD ALLBUTT with a paper of which the following is an abstract. Enlargement of the glands of the neck is practically always due to peripheral irritation, which arises occasionally in the skin but generally in the mucous membranes of the mouth, throat, nose or ear. The enlargement of the submaxillary and cervical glands is bubonic and finds a parallel in the enlargement of such glands in the mesentery consequent upon intestinal tuberculosis, enteric fever and the like, in inguinal enlargements consequent upon penile irritation, and in mediastinal enlargements consequent upon lesions of the respiratory passages. These enlargements of conglobate glands are not primary, even as adenitis, but are secondary to irritation and hyperplasia of adenoid tissue in its finer distribution about the submucous tracts, the causative agents passing from the surfaces to the adenoid tissues. Apart from the implantation of germs themselves there is nothing specific in the glandular hyperplasia, which may be seen in every degree from increased functional activity to excessive hyperplasia and necrosis. This proposition is intended to apply to all non-malignant bubonic growths of which Professor Allbutt had knowledge. The susceptibility of the adenoid tissues or, on the other hand, the facility of access to them varies much with the seat of the primary infection, with its nature, with the age of the patient and with individual disposition. In respect of the seat of the irritation it is found, as it approaches the parts which are richer in adenoid tissue, that enlargement occurs more readily; the tonsils, for instance, are rich in adenoid tissue, and irritations of the tonsil are readily propagated to the smaller and larger adenoid cell-clusters. In respect of the nature of the irritant some—such as the poison of angina Ludovici, of enteric fever or of tubercle—act rapidly and severely; others—such as that of syphilis—act more slowly but still severely; others again—such as those of mumps and the milder septic toxines—may act rapidly but yet not severely. There is, however, no reason to suppose that the adenitis in these several diseases differs in kind. It consists first in a heightened degree of physiological activity and may not go beyond this, and subsequently, if it persists, in loss of physiological balance—in changes, that is, which are then called pathological. The process is probably conservative in intention. Buboes which tend to slow caseation are generally tuberculous. In respect of age great differences in local susceptibility are found. The liability to enteric fever diminishes with age, and Dr. Dowson has very clearly shown[1] that the size and activity of the tonsils after infancy vary inversely as age, and that the liability to contract scarlet fever, diphtheria and the like maladies which may enter by way of the tonsils recedes with the involution of these organs. In respect of individual predisposition some accurate knowledge is available. Clinical experience indicates that secondary adenitis arises more readily in some persons than in others and also that such a disposition may be inherited. Of the specific immunities, inherited and acquired, much has been written, but into that Professor Allbutt could not then enter. It is probable that in the absence of pathogenic microbes glandular enlargements may occur in the presence of excessive products of destruction, but that they are mild and transitory. It is likely, however, that scrofulous neck is always due to the entrance of a pathogenic microbe, generally by way of the tonsil; and it is also probable that more than one microbe may enter into some such series—that, for example, the bacillus of tubercle may follow

[1] Thesis for degree of M.D. at Cambridge, 1893.

and carry on the work of Löffler's bacillus or of the hypothetic microbe of scarlet fever and that ordinary pyogenic cocci may follow any of these. Hyperplasia of the smaller adenoid masses is probably of no nosological importance. Hyperplasia of the larger masses, when it does not exceed the limits which are conveniently called "physiological," recedes without serious injury to the patient and is probably a beneficent process. When hyperplasia of these masses passes beyond physiological limits it may lead, and commonly does lead, to necrosis. In the majority of cases this necrosis is not extensive, the dead matter is removed more or less quickly and health is restored. Syphilitic buboes, if not also infected by pyogenic cocci, are disposed to yield to medicinal treatment. When the hyperplasia and the necrosis are excessive there is not only much to be done in the removal of the accumulation of dead material, itself prone to spread disease, either in the dead matter microbes find a favourable bed, or the products of decomposition by weakening the tissues around, render them more vulnerable or less capable of defence. If the process be less intense or the patient be more vigorous a cure may be indirectly attained by support of the vital powers of the patient and the attenuation of the process in time. Of direct cure there is none by way of medication. If the process be more intense or the patient be less vigorous the morbid changes may end (by implication of additional areas or by infection of the blood, in systemic death, or if they fall short of this they may result in serious constitutional and local injury. When, therefore, indirect means of cure fail or seem to be inadequate direct means must be used by way of surgery. The time for using surgical means must depend upon the conditions of each case. Professor Allbutt pointed out, first, that the obvious swellings in scrofulous neck may not be glandular only, or glandular at all, but may be and often are secondary cellular suppurations due perhaps to the association of pyogenic microbes with more specific microbes; and secondly, that if the obvious swellings be altogether or in part glandular, they in their turn may be and often are secondary to disease in other glands lying out of sight—as, for example, at the inner end of relatively long and narrow sinuses or behind muscular or fascial extensions. To leave such a degenerate mass behind is to run the risk of a reopening of the evil or of a general tuberculosis. To be content, therefore, with attacking the visible swellings by means of the actual cautery, as was recommended in 1881 by so able a surgeon as Mr. Treves in preference to the practice of radical enucleation, is to be content with superficial labour. The radical method, which was described at the International Medical Congress in 1881 by Mr. Pridgin Teale and himself (Professor Allbutt), would be described by Mr. Teale in the light of experience, which, as Dr. Bowles observed, was then insufficient. That the indirect corroborative measures of relief were none the less valued by them it is needless to say; nor are these measures likely to be underrated by Dr. Ord and by Dr. Griffiths of Swansea, who gave them their support, but Professor Allbutt added that a short treatise on the same subject by them was published by Messrs. Churchill in 1885 under the title of "Clinical Lectures on Scrofulous Neck."

Following on the same subject Mr. PRIDGIN TEALE, said: "When invited by the President of this Section to open, in conjunction with Professor Clifford Allbutt, a discussion on the treatment of enlarged cervical glands I must confess to a feeling of doubt as to whether I could produce material of value which had not already been adequately brought to the notice of the profession in the work on 'Scrofulous Neck' and on the 'Surgery of Scrofulous Glands,' published eight years ago jointly by Professor Allbutt and myself. This work, an expansion and further development of the paper read by Professor Allbutt at the International Medical Congress in 1881, enunciated emphatically, from the physician's and the surgeon's points of view, the principles on which the treatment of these cases should be based and the surgical details which were essential to the carrying out of these principles. Three considerations, however, seemed to justify me in undertaking the task. The first is that your President and those jointly responsible with him deemed the subject to be worthy of consideration and one the discussion of which was likely to be of service. It would give an opportunity for the interchange of views by those who have had experience in dealing with such cases and would at the same time lead to the diffusion of information amongst those medical men into whose care such cases usually fall. The second consideration is that the work by Professor Allbutt and myself has long been out of print. A third is that on looking into the text-books I find that so little notice is taken of the principles underlying the accurate surgical management of diseased cervical glands. In a paper such as this it is impossible to deal exhaustively with the subject or to cover the whole ground. I may therefore fairly restrict myself to certain points which seem more especially to demand our attention at the present time. There are two aspects of the question which must be kept steadily in view, the pathological and the æsthetic. Our guiding principle must be, in the words of Professor Allbutt, 'that whenever septic material is contained in the system we rest not until it is expelled and its burrows are laid open and disinfected.' In doing this the surgeon must make it an artistic study how to effect his purpose with the smallest possible amount of blemish. The ugly scars and unseemly depressions, once so familiar in scrofulous necks, should be deemed an opprobrium to surgery, whilst to delay operation until the skin is thin, red and ready to break down or has already given way should be looked upon as being mischievous trifling. May we not hope moreover that the time is not far distant when the absolute inutility of painting the skin in the hope of influencing a caseating gland which is deeply seated beneath muscle and deep fascia will be fully realised by the professional mind. Let us first deal with the æsthetic question, which may be stated in the following propositions. 1. Whenever fluid—i.e., pus—can be detected in connexion with a diseased lymphatic gland the operation should be done before the skin becomes red and thin—that is, before the skin has been spoiled by advancing suppuration. 2. When the diseased gland is subcutaneous—i.e., not beneath the deep fascia or muscle—and has been completely removed the least scar will result if neither stitches nor drainage-tube be used, especially if it be possible to leave the wound uncovered by dressing and exposed to the air, so that the edges may be drawn and glued together by drying lymph. 3. If the diseased gland be beneath the muscle or muscular fascia a drainage-tube must be used and the edges of the wound united by suture. For this purpose probably horsehair and silkworm gut well soaked in carbolic lotion are the best sutures. The best drainage-tube is the gilt spiral wire, especially as it may have to remain from two to eight or ten weeks, according to the depth of the wound, or the completeness of the removal of the gland. 4. Where many glands have to be removed it is better, so far as may be, to remove them through a series of small incisions and thereby to avoid very extensive ones. On the pathological aspect the following points are worthy of attention. 5 All sinuses and suppurating cavities should be thoroughly cleansed by means of scraper and lint, so as to leave a fresh surface free from granulation or decayed or decaying tissue, and drainage should be maintained until all the deep parts are healed. 6. It is essential to know and to bear in mind that the visible abscess, which has often been called and treated as a suppurating gland, is frequently but a subcutaneous reservoir of pus, the source of which (a degenerate gland) is not subcutaneous but subfascial—i.e., under the deep cervical fascia and often submuscular under the sterno-mastoid, the communication between the two being a small opening in the deep fascia just large enough to admit a probe or director. This opening may easily be overlooked, and is not always easily found even when searched for; but it must be found or the operation will be a failure. 7. It is mere trifling and bad surgery simply to incise an abscess in the neck without searching for and thoroughly eradicating the gland that is the starting point of the abscess. Therefore no such abscess should be opened without putting the patient under ether and being prepared with all necessary means for eradicating the diseased gland. 8. It sometimes happens that after the extirpation or evisceration of a gland the finger detects in the wall of the capsular cavity the slight convex bulging of a contiguous gland. This should be pricked through the wall of the cavity and so reached and extirpated or eviscerated. In this way in several instances I have emptied from one external opening a group of three or four glands, massed together and suppurating or otherwise broken down. 9. What has been said hitherto concerns glands which are suppurating or obviously breaking down. As to caseous glands, the conclusions I have arrived at are as follow: When we have dealt with a broken-down gland which has proved to be undergoing caseous degeneration, we may infer that any other enlarged glands then present or subsequently appearing are becoming caseous also. Therefore it is my belief that it tends to improve the health of the patient if, in the absence of reason to the contrary, such

glands are removed as soon as the surgeon is convinced that the enlargement is persistent and not merely transitory without waiting for evidence of fluctuation or pus. 10. What shall be done with enlarged glands which are neither caseous nor suppurating—glands included in the terms 'lymph-adenoma,' 'hypertrophy,' &c.? I am not clear as to what answer should be given, nor whether their removal is an advantage or otherwise. Probably this will have to remain an open question for some time yet. 11. In a very large number, indeed in a majority, of the instances of scrofulous neck which have come under my care there was no evidence of any constitutional taint or weakness. The origin of the ailment was often clear and defined, bad drains in many instances, scarlet fever, mumps &c. The cases were frequently isolated instances in families free from any tendency to constitutional disease, and health and perfect vigour were restored after the destruction of all degenerate or septic material. In conclusion, let me say that there are certain forms of instruments which have proved to me of great service in dealing with diseased cervical glands: (1) The director described and figured in my Address in Surgery in 1889; (2) Bigelow's dilator for widening deep sinuses and avoiding the use of the knife in dangerous regions; (3) Lister's scraper, which is a better form of instrument than Volkmann's spoon; and (4) a scalpel of proper lancet shape.

"In order to test the permanent effect upon health in the 23 cases recorded in our book upon 'Scrofulous Neck,' and also the question of any signs of persistent constitutional taint, secondary poisoning, or vulnerability, I have within the last month addressed inquiries to every one that I could trace, and with the following results: In 5 instances I have had no answer, but one of the 5 was in good health a year ago. Three have died, 1 suddenly from heart disease, 1 from abdominal cancer, and 1 from phthisis a year after operation. Three are in 'fair health,' 1 was in 'good health' a year ago, and the remaining 12 are reported as in 'very good health.' Of the 16 in good or fair health 11 had no secondary operation. Four out of the 23 underwent multiple operations, 2 of whom are in good health, 1 in fair health, and the other was in good health a year ago. Of these 4, upon one four operations had been performed. A second patient, referred to in our work as having had nine operations, underwent a thirteenth two months ago, the last three being caseating inguinal glands. A third patient had three operations on the neck and one on the axillary glands. A fourth had five or six operations, the last three years ago. These facts prove two things: (1) That it is possible in most cases to get to the bottom of the disease in one or two operations; (2) that in most instances disease of cervical glands, whatever its origin, is practically a local disease and needs to be dealt with by local measures, and that it is rarely the expression of a general constitutional defect."

A number of speakers took part in the interesting debate which followed the reading of the papers

### FRIDAY, AUG. 4TH.

#### *Heart Disease in Children.*

The third day of the meeting was devoted in this Section to a discussion on Heart Disease in Children, which was opened in a paper by Dr. F. C. COLEY, in which he began by saying that without doubt many cases of heart disease were truly rheumatic in origin, even when no history could be obtained of an attack of rheumatism affecting the joints. It was a clinical commonplace that rheumatism affected the heart in children more than in adults and that the joint affection was really milder in children. This was only a small part of the truth. Cases certainly had occurred in which endocarditis and pericarditis might be the only manifestation of an attack of acute rheumatism, their being no joint affection at all. Whilst this might occur in adults, it happened much more frequently in children. The physical signs of heart disease being so much more common in children than in adults, the question arose as to what was the later history of the cases. It was not probable that a sufficiently large number of them died to account for the discrepancy. He was sorry it was not possible to apply the statistical method to the discussion of the question, so many of the cases which came under their notice disappearing without any way of estimating what became of them. Although the deaths did not account for the discrepancy the heart symptoms might yet be a cause of weakness which would increase the mortality from other diseases. The physical signs frequently disappeared in children as they grew older, and the recovery of actual valvular lesions was more probable in childhood than in adult age. Discussing the causes of the disease, he said that the recognition of the probability that mitral regurgitation in children was often due to dilatation suggested that all such cases should be treated by prolonged rest and with heart tonics, including iron. Even where actual valvular deformity existed, prolonged rest gave, perhaps, some chance of complete recovery, and certainly gave the best opportunity of satisfactory compensation.

In the discussion which followed, Dr. TOWNSEND spoke of scarlet fever, as well as rheumatism, being, in some way, a cause of heart disease. He thought that rheumatic children should not indulge in games like ordinary school children, and he always advised that they should specially avoid sea-bathing.—Dr. BYERS said that in his experience mitral disease was more common in female than in male children; no explanation seemed to account for this unless it was the more frequent occurrence of chorea in girls than in boys. Whilst he admitted the frequency of dilatation of the heart in children (a much more marked feature in children than in adults), he thought that the murmur in chorea was mainly organic, and that even in cases when it disappeared this might be accounted for by the absorption of the exudation on the valves. Having referred to the acute forms of heart disease met with in children, he strongly advocated rest as of the greatest importance.—Dr. DAWSON WILLIAMS referred to the obscurity of the etiology of the insidious forms of heart disease in children. Rheumatism accounted for a number, but a large set of cases did not fit in with a rheumatic history.—Professor COLQUHOUN (Dunedin, New Zealand) having spoken of the value of Dr. Coley's paper, the President, Dr. BARLOW, said that with respect to the evidence of rheumatism in children, he felt that they wanted to see the whole history of the child before they could exclude it. A child when first examined might simply have a cardiac bruit, but, if watched closely, the presence even for a short time of a stiff neck of a fugitive erythema or of a swelling of a single joint would establish the rheumatic etiology. He thought, with Dr. Coley, that in cases of septic or malignant endocarditis partial recovery was possible, though he never saw a case where the conditions entirely passed away. He emphasised the importance of dilatation in cases of heart disease in children and mentioned its occasional occurrence during the renal complications of scarlet fever. Finally, he referred to the great difficulty in prognosing in cardiac affections in the young; as a rule, he thought loudness of the murmur indicated greater implication of the valves.—Dr. COLEY having briefly replied the work of the Section came to a conclusion.

---

### OTOLOGY.

#### *Chronic Otitis Media.*

Professor MACEWEN, in his introductory remarks, said he supposed that this subject—which had been put down for discussion—meant the extension of the middle-ear diseases to the mastoid region and that it included for the most part infective disease of the middle ear, whilst it excluded tubercle and carcinoma. In the first place, with regard to the pathology of pathogenic infective diseases, he found, as no doubt was a common experience, that the great majority of those diseases travel from the middle ear to the mastoid antrum and cells, and that they invaded and destroyed the mucous membrane of the bone and the dura mater, in many instances giving rise to erosion of the bone. Masses of granulation tissue exuded from the dura mater and were removed by absorption. Fresh surfaces came into contact with infective material pent up in the middle ear. Speaking generally, he agreed with Schwartze as to his recommendation regarding the time at which the operation should be performed on the mastoid in infective purulent disease of the middle ear. In such cases the mastoid antrum and the mastoid cells ought to be ablated. He then referred to the surgical anatomy of the mastoid regions and pointed out the relative position of the mastoid antrum and sigmoid sinus and the facial canal; and he showed that there was a space which could be attacked in safety, with the view of striking the antrum and which he had named the "suprameatal triangle." This triangle was free from the sigmoid sinus and if the surgeon operated on the upper and external point the facial nerve was avoided. The facial canal lay on the floor of the passage between the antrum and the middle ear and traversed the floor of this passage to the near side. As a rule,

after opening the antrum, the attic of the middle ear was exposed by enlarging the opening. After exposing the attic the ossicles were removed and the whole granulation tissue of the middle ear was cleared out. After this the tympanum and the attic were scrutinised by a sufficient light and if found to be eroded they were freely opened up, the granulation tissue being removed from the dura mater and the brain laid bare or if necessary opened into. The diseased bone could be attacked from this region and it had also to be done in order to remove the sloughs of cerebral tissue which could not otherwise come away. The sigmoid sinus was otherwise dealt with in cases where the disease had spread in that direction. In all these cases it was necessary to remove the focus of infective material in the bone and to cut off its track from the brain, and therefore, although the opening might be made into the diseased part through the squamous bone, the pathway by which the affection travelled would require also to be dealt with. With regard to an infective thrombus in the sigmoid sinus he preferred to lay the sinus freely open, to turn out the contents and separate the outer wall of the sinus, and to involute the mucous membrane upon the inner walls of the sinus, the retaining it in its position by means of iodoform, boracic acid and also iodoform gauze. He preferred this method to that of ligaturing the external jugular vein because ligature of this vein did not wholly prevent the infective matter from invading the lungs, as it might pass through the large veins at the base of the skull, then through the antrum and the posterior condyloid foramina, into the cerebral artery and so into the subclavian. There were cases, however, in which the internal veins were involved, and in such cases he would advise the application of a ligature to the external jugular vein. With regard to the mastoid antrum, after having freely exposed the whole cavity and having obliterated its connexion with the mastoid cells themselves, he did one of two things. If the whole of the disease was removed he stuffed the part and allowed it to heal by granulation tissue from below, so that a mass of fibrous tissue formed in the space previously occupied by the antrum and cells. Where the disease in the petrous portion of the temporal bone had not been thoroughly evacuated on account of the depth of the situation and the intricacies of the passages in which it lay, he preferred to keep a permanent opening between the petrous bone of the middle ear and the external surface of the head. He did this by "papering" the passages by means of epithelium, spreading from both the middle ear and the skin. He had operated upon eighty cases for mastoid disease alone, and in those where the disease had already been obliterated by the operation he found that a permanent cure had resulted, but in those in which the disease had spread into the temporal bone it was necessary to keep this opening permanent and in many such cases an amount of discharge of an aseptic kind continued for years afterwards With regard to meningitis following upon infective disease of the middle ear, although at first he had had a doubt as to the propriety of operating where infective purulent meningitis had developed, he now had no hesitancy in performing such operations, and in a great majority of them he had had very excellent results. The disease, even where it had been present to a marked extent, had been arrested by interference. In cerebral abscess there was no difficulty about performing the operation. It was one of the most satisfactory operations that could be performed upon the head, because it was urgently required. Pathological products were taken away and the results were eminently satisfactory. With regard to thrombus of the sigmoid sinus he had to make a like remark, provided always that the case was seen prior to implication of the lungs and of the system generally.

Mr. VICTOR HORSLEY remarked that he had followed Professor Macewen's method of operation as all who had given attention to this subject had done. Having mentioned the element of time which should elapse before operation was begun, he stated that the mastoid antrum, cells, and the tympanic cavity should be opened and afterwards drained for a considerable period of time. He illustrated diagramatically the course of the facial nerve and how it should be avoided. He pointed out the necessity of looking out for exposure of the facial nerve, and suggested nerve grafting in cases where that nerve had been destroyed, as it not unfrequently was in tuberculous disease. With regard to his original proposal of ligature of the jugular vein, he pointed out that there were cases in which the trouble was existent beyond the jugular foramen, and under these circumstances nothing but ligature would save the patient.

In reply to Mr. Victor Horsley, Professor MACEWEN said that he thought there was a difficulty in ascertaining the position of the facial canal in cases of sclerosed mastoid. In ordinary cases, however, the facial canal was well marked by the position of the bone in which it was found, and especially relatively to the cancellated tissue by which it was surrounded; but he always asked the chloroformist to watch for the twitching of the facial nerve produced by a touch and to apprise him if at any time such occurred. In this way the operator's attention was not diverted With regard to dressings they were applied at the operating table and the parts were not again touched for a fortnight and sometimes for three weeks unless some such symptom as high temperature or discharge supervened. With regard to the suprameatal triangle he had through his assistants examined some 400 temporal bones and had found this triangle well marked in something like 90 per cent. of them. Sometimes the triangle was marked by a distinct fossa. In the German skull there was generally a bulging and the antrum was usually larger. In the Celtic skull the depression was very noticeable.

A discussion followed, in which several of the members present at the Section took part.

---

## DERMATOLOGY.

### WEDNESDAY, AUG. 2ND.

*Ringworm of the Scalp.*

Dr. COLCOTT FOX opened a discussion on the Treatment of Chronic Ringworm of the Scalp. He commenced by contrasting the cure of trichophytosis of glabrous parts with the difficulty experienced in curing chronic trichophytosis capitis, which was due chiefly to the localisation of the fungus, the anatomical structure of the follicles and the character of the culture medium. He then discussed the probability of relative degrees of difficulty being dependent on different species of fungus. Unhealthy, delicate and fair-haired children did not constitute a specially favourable soil. Hygienic and dietetic means and the administration of medicines had a distinctly limited field of usefulness. Passing to the consideration of local remedies, he regretted that, except with regard to knowledge of the fungus and the more rational and precise use of remedies, no great advance in treatment had been achieved since the beginning of the century. He then considered local remedies under the headings mechanical, parasiticidal and irritative. With regard to the mechanical means of cure he dwelt on the enormous importance of epilation, the methods of achieving it, the difficulties owing to the fragility of the hairs and the conditions of its applicability. Quinquaud's rugination was likely to prove useful. Depilatories were of little value. In reference to parasiticides Dr. Colcott Fox discussed the probability of their thorough penetration to the depths of the hair and follicles and whether, even under these circumstances, there was any agent capable of destroying the parasite *in situ* without permanently injuring the tissues. He thought that parasiticides as such had but a limited sphere of action. Passing to the subject of irritants he recalled the exceedingly happy spontaneous cures that were sometimes witnessed, and he said that the imitation of this process was a field of great promise, because inflammatory products were hostile to the fungus and the hairs fell out or were loosened, thus tending to help epilation. Unfortunately, as in epilation, there were practical difficulties to surmount, for the precise amount and kind of inflammation could not easily be produced at will. The action of irritating ointments, liniments, poultices, water dressings, crust-producing pigments &c. were discussed, and the use of croton oil in desperate cases was recommended. Shaving and washing the scalp were also advocated, and Dr. Colcott Fox concluded with a recital of his usual course of procedure in the application of the above principles.

Dr. A. EDDOWES could not agree with Dr. Colcott Fox's opinion that an eczematous condition should not be induced by remedies, because he (Dr. Eddowes) believed that the natural cure which frequently occurred at puberty often assumed the form of an eczema. He thought that the greatest mistake was to excite a deeper chronic infiltration with a fixed condition of the scalp and the formation of a dry, harsh surface—a condition unfavourable to the proper growth of hair.

Dr. EDDOWES read a short paper on the Treatment of Ringworm. He formulated the following conclusions: (1) that when properly treated children should be allowed to attend school; (2) that they should not impair the physiological

functions of the skin, though they may stimulate them; (3) that the scalp should be, at least from time to time, thoroughly cleansed, so that the remedies could come into perfect contact with the skin; (4) that air should be excluded as much as possible; (5) that mercurial and other poisonous preparations, though frequently very serviceable, should be applied to large surfaces with great caution and never for a long period without close supervision; (6) that it seemed to be unnecessary to employ remedies in such a manner as to cause pain; (7) that it was wise to treat the whole scalp in nearly every case at first and to pay special attention to rebellious patches later on; and (8) that epilation was almost useless and that probably it was often worse than useless when left to the nurse or the mother.

Dr. PHINEAS ABRAHAM then presented, on behalf of Dr. R. SABOURAUD of the St. Louis Hospital, Paris, a Typical Series of Cultivations and Microscopical Preparations of the Fungi of various kinds of Ringworm. Dr. Sabouraud's important investigations have attracted much attention, but it is probable that until now very few in this country have had the opportunity of seeing the actual specimens. He considered that the Section was under great obligation to Dr. Sabouraud for sending the interesting series that was then before them. A full summary of the main conclusions arrived at by Dr. Sabouraud from his researches has already appeared in the columns of THE LANCET and will be found in our issue of May 20th last.

The PRESIDENT (Dr. Allan Jamieson) then read some notes on Ringworm, in which he was able to confirm Dr. Sabouraud's observations in some measure—viz., a trichophyton with small spores sheathing the hairs, and with no obvious mycelium in the large majority of cases, of tinea tonsurans of children and a trichophyton with large spores and evident mycelium in tinea barbæ and corporis and in a relatively small number of cases in tinea capitis. In twenty cases in children only two exhibited the trichophyton megalosporon. He alluded to the possible saprophytic origin of some of these tineæ, and also referred to the views of Flügge, Bodin, Sabouraud and Leslie Roberts' on the point. He mentioned Leslie Roberts' theory that the spores were really short-celled filaments, taking their shape from the peculiar surrounding conditions, and that they were not permanent species, but he considered that Sabouraud's observations and views explain better many remarkable circumstances. He spoke of the seborrhœic condition of the scalp as in some degree accounting for the long persistence of the disease. The principles of treatment which he thought to be essential were: (1) To keep the scalp scrupulously clean; (2) to act on the soil with a view to remove the eczema and seborrhœa; and (3) to starve out the fungus by the use of agents inimical to its growth. He cleansed the scalp daily with a potash soap, preferably fluid, neutral and superfatted (5 per cent.), and thus removed scabs, hairs and débris. Dr. Bulkley's ointment (one drachm of tannic acid, five grains of carbolic acid and one ounce of cold cream) frees the scalp from eczema and seborrhœa, and it is both antiseptic and parasiticidal and renders the scalp smooth. The most useful agents to starve out the fungus he has found to be sulphur in combination with a mercurial ointment or oleate of copper. These are rubbed in every second day alternately with the tannic acid ointment.

*Study in Dermatology.*

The PRESIDENT brought forward a motion which had been suggested by Professor McCall Anderson to the effect, "That it be represented to the General Medical Council that students presenting themselves for the final examination for a diploma or a degree should produce evidence of their having had opportunities for the study of the common forms of skin diseases."

This was seconded by Dr. J. ROBERTS and was discussed by Dr. LESLIE PHILLIPS, Dr. RADCLIFFE CROCKER and Dr. NORMAN WALKER.

Dr. RADCLIFFE CROCKER proposed as an amendment, which was seconded by Dr. COLCOTT FOX, "That in the opinion of this meeting, since the five years' curriculum having been established for only a short period, it would be advisable to defer the resolution proposed to a future meeting."

This was carried and the original motion was withdrawn.

*Therapeutic Note on Emol.*

The PRESIDENT then read a Therapeutic Note on Emol, a mineral powder which is obtained in Perthshire and which is allied to Fuller's earth in its nature, and which contains steatite, silica, alumina and lime. Mixed with water it can be used as a soap and has a softening effect on the hands, and is useful in some cases of keratosis and similar conditions. It is also superior as a dusting powder to many now in use and has some antipruritic power.

*Cases.*

Dr. ARTHUR T. DAVIES then gave an account of four cases—two of psoriasis and one of ichthyosis and also of chronic eczema—which had derived great benefit from feeding on thyroid tabloids. The case of ichthyosis and one of psoriasis had been entirely cured without any other treatment; the remainder had been much improved. The suggestion as to this treatment had originated with Dr. Byrom Bramwell, who had been struck with the great improvement in the condition of the skin after thyroid feeding.

*Dermatological Instruments.*

Dr. PHINEAS ABRAHAM exhibited a case of new Dermatological Instruments which had been made for him by Messrs. Maw, Son and Thompson. He called special attention to (1) a comedo-extractor, made in the form of a forceps with hollow blades, and so notched that when closed the instrument could be used as a watch-key—it could also be used to compress furunculi and for other purposes; (2) a dermatological spatula, useful for scraping the skin in tinea and for lifting crusts &c.; and (3) a curved, bent-up, epilating forceps.

The PRESIDENT remarked on the utility and novelty of the instruments, especially of the comedo-extractor and spatula, and made suggestions with regard to some of the others.

*Tuberculous Eczema.*

Dr. A. EDDOWES read a paper on the subject of Tuberculous Eczema. He said: "Unna first called attention to this type of eczema in 1884[1] and since that date he had several times written on the subject, yet so far as I am aware little notice has been taken of it, especially in this country. Those who do not care to read his original papers in German I would refer to his address on the Employment of Tuberculin in the Treatment of Lupus, read in Hamburg in 1891 and translated and published in Nos. 32 and 33, vol. iii., of the *British Journal of Dermatology*. There he makes his case good, I think, that a tuberculous eczema exists. The disease which he describes is, however, a very acute and serious affection and one which I have seldom seen. What I wish now specially to draw attention to is the existence of less acute and quite chronic forms of eczema, which are due, in my opinion, as certainly to the tubercle bacillus as lupus itself. It is found alone as a distinct lesion or on the same patients who exhibit typical lupus vulgaris, is mixed up with lupus patches and appears to pass into lupus; in fact, I feel much disposed to suggest the term 'tuberculosis epidermidis' for it, and 'tuberculosis cutis' for lupus vulgaris. It was my intention to have read the notes of three cases, but as time is so pressing I propose only to describe one and that briefly. The patient is still attending Dr. Dawson Williams' clinic at Shadwell under my care and I am indebted to him for permission to publish the case. The patient, a little girl, who has already been shown to many members of the profession, came to me suffering from photophobia of the right eye; she also had conjunctivitis with phlyctenulæ in the same eye. Around the eye and covering nearly the whole of the right cheek was what I considered to be quite a characteristic tuberculous eczema. On her right wrist (back and radial aspect) was a patch about the size of a crown-piece of verrucose lupus, with perfectly typical Hutchinson's apple-jelly centres of degeneration. On the tip of her right elbow was a patch, quite circular and size of half-a-crown, of dry, red, exfoliating or rather coarsely desquamating eczema, very similar to that on the face. All these lesions are said to have existed for four and a half years. The eczema on the cheek was red, dry, somewhat harsh and firm to the touch and coarsely desquamating and was remarkable for the absence of itching, its fixed character and chronicity. I suspected that it was tuberculous even before I observed the affection of the wrist. Now the lupus of the wrist is, as I said, quite unmistakable, and it was a most significant fact that I saw the patient steadying her right upper eyelid and shading her eye with the very portion of the wrist corresponding to the central part of the lupus patch. The eye is now quite well and the eczema has completely disappeared, leaving no clear traces of disease but, on the contrary, a beautifully clear complexion. There remains only a slight trace of ptosis, which is, I think, due to a want of muscular tone and to a degree of inelasticity of the skin left by the eczema. The wrist is still under treatment. It has greatly improved under sulphur and zinc alternately with salicylic acid and tar. During the applica-

[1] Deutsch. Med. Zeit., 1884, Nos. 43-47.

tion of the sulphur and zinc ointment (half a drachm of sulphur to one ounce of zinc ointment, I observed a curious reaction. Not only did the patch and its satellites swell up somewhat after the manner of the tuberculin reaction, but points unobserved before likewise became active. This subsided without the discontinuance of the application which caused it and then presented what I consider the typical red, somewhat roughly desquamating, non-itching surface of what I suggest may be termed 'chronic tuberculous eczema.' The affection is important and is by no means rare."

## THE RELATIONS BETWEEN THE BLADDER AND URETERS: AN EXPERIMENTAL RESEARCH.[1]

BY PROF. L. LEWIN AND DR. H. GOLDSCHMIDT, BERLIN.

CONSIDERING the number and variety of morbid conditions which are shared by the bladder and kidneys it is surprising that the intermediate channel, the ureter, should show no trace of the pathological change that has passed through it in either direction. It is especially remarkable to note how seldom the ureter, from its vesical orifice to the pelvis of the kidney is affected in ascending inflammation. The absence of any notable change in the ureter in many acute processes, toxic or infective, such as follow instrumentation of the urinary passages—so-called "urinary" or "catheter" fever—has led the renal and general symptoms to be attributed to reflex irritation, shock &c. Occasionally hydronephrosis exists without any mechanical obstruction, or nephralgia and colic with a permeable ureter, or with such slight alteration in the ureter or pelvis that the clinical phenomena can be no better explained than can the pathological changes in the kidney. Hence the suggestion that the function of the ureter may be disturbed without necessarily leaving any permanent change which can be seen after death. Further disturbance may be set up in it by therapeutic injections of fluids into the bladder and be shown by subjective symptoms.

Cystoscopy has notably heightened interest in the physiology and pathology of the ureters, since by its means we can study the orifices and observe the action of the ureter in a way not applicable to any other deep-seated organ without the aid of surgery. The rare occurrence of ectopia vesicæ also affords a similar opportunity. By means of cystoscopy important clues are given to the state of the kidneys when abnormal products such as blood or pus flow down the ureter. In the normal state the slightly everted lips of the ureteral orifice can be seen to swell up at intervals, when a small quantity of freshly secreted urine is ejected into the bladder. At times these lips are drawn in and narrowed; at others they are broad and protruded, their movements causing the extrusion of the contents of the ureter as if with difficulty. In the interval the lips are firmly compressed, whilst the jet of urine varies from a feeble trickling to a forcible and energetic spurt. The quantity expelled varies and also the duration of the contractions, showing that the function of the ureter is governed by manifold circumstances and changes in health, and these variations have a clinical and pathological importance not hitherto recognised. A series of experiments was undertaken last autumn, attention being first directed to the ureteral orifice. The question put was: What is the normal mode of closure of the entrance of the ureter into the bladder? Is a reflux from the bladder possible and what conditions are necessary thereto? The anatomical conditions would seem to negative the possibility of such a reflux, however much clinical phenomena favour it, for the ureter, after passing along the posterior and inferior surface of the bladder, penetrates the wall obliquely, to end in a fine aperture in the mucous membrane. There are then three factors which make a reflux difficult to explain: (1) the firmly closed lips of the ureteral orifice are only separated at the instant of the ejection of urine; (2) the oblique passage of the ureter through the bladder wall, so that it is easily compressed by the contents of the viscus; and (3) the narrowness of the cord-like ureter, which closes behind each drop of urine. Not much stress need be laid on the difficulty of finding or sounding the orifice and ureter in the cadaver, but by the cystoscope, when the parts have their natural vascularity, there is the appearance of a kind of ring encircling the orifice and keeping its lips closely pressed together, the urine being ejected by means of a regular peristaltic movement. That a reflux can occur seems to be scarcely conceivable. Since first pointed out by J. L. Petit all writers aver that the obliquity of the course taken by the ureter in the bladder wall necessitates its complete closure when the bladder is full. Guyon and Albarran,[2] by experiment, thought that it was impossible for reflux to occur and that dilatation of ureters did not result from such reflux, but from an arrest of the ureteral peristalsis from the pressure within the bladder and the setting up of stasis. They found that, when carbon particles were injected into the bladder and the urethra was ligatured, the particles after a long time made their way into the ureter and pelvis. They explained this by the tendency of such particles to rise in the stagnant column of fluid, whilst microbes might find their way up by their own movements. The passage of the contents of the bladder into the ureter could only take place as a late sequel to intravesical pressure and the consequent dilatation of the ureteral ostium.

The experiments were made exclusively upon male rabbits, in which the ureteral orifice is narrow and barely visible and, as in man, the ureter courses obliquely through the bladder wall, the ureter itself being very small and cord-like. The fluids injected were milk and staining fluids and, just as in man, the ureters could not be injected from the bladder after death. First these fluids were injected under high pressure under chloroform and the abdomen opened to view the ureters, but nothing seemed to pass. Even in the most successful attempts only the minutest traces of the bladder contents could be found in the ureters. Then an unexpected change occurred in the results. Some milk was made to flow into the bladder from an irrigator, moderately distending the bladder, which apparently resisted the pressure, and, whilst keeping up the same pressure, the abdomen was opened and saw the right ureter distended with milk, which jetted out on dividing the ureter. This outflow continued as long as the irrigation was maintained without the bladder undergoing any change in volume. The ureter had been quite full of milk as far as the renal pelvis. This experiment alone proves the incorrectness of the accepted view. Further experiments clearly showed the reasons of failure or success in result, the necessary condition for the latter being that the bladder should still be contractile and not over-distended, for over-distension acts as an obstacle to the reflux and it was often noticed that as soon as the ureter was distended it could no longer contract but remained dilated. With smaller amounts of fluid in the ureter it would seem that the ureter is capable of discharging its contents back into the bladder and that is why one ureter was generally fuller than the other.

The next step was to observe directly the mode of entry of fluid into the ureter. This was seen to take place rapidly by anti-peristaltic movements, whereby the milk or methyl blue solution rose in the ureter or was sucked into it. The conditions for this were manifold and required numerous other experiments. It seemed as if a combination of factors was necessary to effect it. Although so far the study had been limited to the effect of injections, it was probable that under certain conditions, the bladder retaining some contractility, like effects could occur spontaneously and have a general application to the pathology of the urinary passages. It would seem that with a bladder not markedly distended the contents can overflow into the ureter and pelvis if the escape be prevented by ligature of the urethra. This could be seen after waiting a long time, often for three-quarters of an hour, before the coloured fluid began to rise. Then, too, the ureter would undergo a much more active and violent contraction, causing the fluid to rise and fall. The ureter would thus be alternately full and empty, from the pelvis to the bladder, as if under the action of a system of pumps.

Collating these results of direct observation, it is shown that there is a backward flow of the bladder contents ensuing on injections or on artificial retention, provided that the bladder is active and capable of contraction, its muscle not being overstretched. Generally the entrance of the fluid into the ureter corresponded with the fall of its wave. Often the fluid rose rapidly, like the rise of the mercury in a thermometer that is being heated; often its entrance was slow, as if gradually sucked up by the cessation of the normal movements of the ureter. Anti-peristaltic waves were repeatedly observed,

[1] Abstract of a communication made to the Berlin Medica Society, July 12 h, 1893

[2] Archives de Médecine Expérimentale, vol. ii. 1890.

but whether these were primary or resulted from fluid waves passing upwards could not be determined. The staining fluid would rapidly fill and distend the ureter and pelvis, paralysing their contractility, or collections of fluid would be retained here and there by spasmodic contractions of the tube. Frequently the ureters would evacuate their abnormal contents into the bladder or the distension of the pelvis would be evoked by spasmodic contractions. Are the causes of the phenomenon physical or biological? Certainly mere pressure conditions do not suffice; if so, it would occur more promptly. There would have been no failures; yet the fluid did not rise when the pressure was highest and the bladder over-distended. Hence one came to the conclusion that it was essentially due to the independent action of the ureter. How do the mouths of the ureteral orifices open? Neither contraction of the bladder itself nor electrical stimulation opens them. Rather is it that the ureter acts independently of the bladder and the anti-peristalsis observed points to this, for it seems to require that the ureteral mouth must first be opened, and once this condition is set up the fluid must rise in the tube. The ureteral movements are excited by the entrance of urine into them. It can be excited by pressing urine out of the kidney, when contraction of the ureter follows, whilst if the pelvis be laid open this does not ensue. Just as pressure from above so may suction from below act. When the bladder is filled with air and then rapidly expelled by pressure the ureter is excited to contract from above; and, as our experiments show, the entrance of fluid from the bladder into the ureter invariably starts contractions. Everything points to a primary acute reflux of urine from the bladder into the ureter in man under conditions similar to those of our experiments. The conditions capable of producing the phenomenon are frequent and varied, including all kinds of obstruction to the outflow of urine, not only strictures and prostatic impediments, but also acute swellings, spastic conditions and those momentarily brought about by the use of instruments. Washing out the bladder may often cause a reflux. In states of irritable bladder, as in tuberculosis or gonorrhœal cystitis, the contractile bladder may excite a flow into the ureter. The immediate effect of a reflux is either to cause dilatation and paralysis of the ureter or its spasmodic contraction. The further effect depends on the retention being acute or chronic, whether the flow has occurred only a short time or is more lasting, and whether the rising current contains inflammatory matters or not—at least, the disordered function of the ureter must sooner or later act on the renal secretion. Hydronephrosis may ensue from defective power of emptying the ureter and the actual increase of intra-renal pressure may cause nephralgia. The sudden filling of the renal pelvis with septic material will cause not only pyelitis, but the acute phenomena of so-called urinary or catheter fever may arise. Distension of the ureters under all conditions will be marked by pain; the cramp-like movements observed on the entrance of fluid are those of colic. The phenomena observed in these experiments may thus explain many symptoms which often arise acutely as rigors and other febrile phenomena, pyuria, lumbar pains and especially ureteral and renal colic. It may happen that the clinical importance of the phenomenon will be clearly recognised and its results averted by appropriate measures, including not only the prompter operative removal of an obstruction to the outflow from the bladder, but also in the future the opening of the renal pelvis. For this operation theoretically fulfils all indications and has been proved of value, when it removes the painful, colicky results of ureteral and pelvic stasis and dilatation, although it had been done not with that object, but for the removal of a problematical stone.

# CHOLERA.

## CURRENT NOTES, COMMENTS AND CRITICISM.

A STRIKING feature in the cholera epidemic of this year has been the distribution of the disease in Europe and its manifestation in local outbreaks or as sporadic cases in many different places, and the tenacity with which it has clung to some of them without giving rise to any wholesale outbreak like that which characterised the cholera of last year in Hamburg, for example, where it looked like a case of water poisoning on a large scale. Where the public water-supply has been good and wholesome the disease has not assumed any formidable or epidemic proportions. We may refer here, *en passant*, to a communication from Egypt in the present number of THE LANCET descriptive of the events connected with the return pilgrims from Mecca. It will be seen that the experience of 1893 is corroborative of that obtained in the epidemic of 1881, and the facts are noteworthy. The health of the staff and of the villagers outside the quarantine station of El Tor is said to have been satisfactory, the disease confining itself to the pilgrims. In 1881, when the total number of pilgrims was about 10,000 and the number of the sanitary staff, soldiers, inhabitants &c. from 4000 to 5000, the disease did not spread from the pilgrims to other people, notwithstanding the close communication of many of them with the pilgrims.

In continuation of our weekly chronicle of the progress of cholera we may commence with the official intelligence from St. Petersburg, where a case of suspected cholera terminating fatally was announced on the 5th inst. There were 29 cases of cholera and 15 deaths in Moscow on the 29th and 30th ult. In the province of Orel there have been 289 fresh cases and 129 deaths, in Kherson 71 cases and 31 deaths, in the Don province 48 cases and 25 deaths and in Grodno 19 cases and 1 death. The disease still continues to prevail in Podolia. A woman who had recently arrived in Warsaw from Podolia was attacked on the 6th inst. and this is said to be the first case of the disease that has occurred there. The latest telegraphic intelligence from St. Petersburg shows that from July 11th to the 24th 258 persons were attacked in the government and town of Nishni Novgorod, the deaths numbering 102. Four fresh cases are reported from Charkoff. The official returns of the cholera epidemic during the past week are as follows: In the province of Podolia 390 cases and 136 deaths; in the Don Province 106 cases and 40 deaths; Kursk, 69 cases and 27 deaths; Tula, 95 cases and 22 deaths; Kieff, 56 cases and 28 deaths; Saratoff, 24 cases and 2 deaths; and Bessarabia, 17 cases and 8 deaths. At Moscow there were 121 cases and 43 deaths, and at the town of Rostoff 75 cases and 35 deaths. If Bessarabia be excepted these figures show a considerable increase over those of last week.

From Bucharest we learn from the *Official Gazette* that from the 9th to the 23rd ult. 12 sporadic cases occurred at Braila, 7 of which terminated fatally, those attacked being dock labourers living under the worst conditions. It is alleged that only 2 of the cases afforded bacteriological evidence of cholera; but as 5 fresh cases and 2 deaths from the disease were reported from Braila on the 5th inst. and 15 fresh cases and 4 deaths on the 7th and 26 cases and 5 deaths in Sulina, there does not seem to be much doubt as to the real nature of the disease. The latest intelligence shows that for the twenty-four hours ending at noon of the 9th inst. there were 8 fresh cases and 2 deaths at Braila, and 14 fresh cases and 7 deaths at Sulina.

According to a telegram from Sinaia of the 6th inst. cholera had broken out amongst the troops in the Sulina garrison at the mouth of the Danube.

A suspicious and fatal case occurred at the East-end of Berlin and gave rise to some alarm, but it is very doubtful whether the case was one of cholera.

From Vienna there is intelligence that 11 cases of suspected cholera were reported as having occurred in twenty-four hours in the Maramaros district in Hungary. Three fresh cases of cholera were registered at Madwoma in the province of Galicia on the 6th inst., and fresh cases have also occurred in other parts of Galicia, in consequence of which the authorities have taken precautionary steps against the spread of the disease. Two fresh cases of cholera were reported from Raho in Hungary on the 8th inst. From Budapest several suspicious deaths are reported on the 7th as having taken place in a few days in the Archduke Charles's barracks.

The situation in Italy seems to be improving on the whole. There were 11 cases of cholera and 4 deaths at Naples on the 6th inst., but the mortality amongst the townspeople from other causes is still, however, very high. The latest accounts show that there were 7 deaths from cholera on the day ending at noon of the 9th inst., but some cases had occurred in certain districts of the Terra di Lavoro to the north of Naples, and other cases in several communes in the vicinity of Mount Vesuvius as far as Torre-Annunziata. Two cases also occurred at Nola. The disease seems to have disappeared in the province of Alessandria, Piedmont. Some deaths are said to have taken place in Rome from cholera amongst persons who had recently arrived from Naples.

At Montpelier there have been 7 deaths from cholera since the 5th inst., and 3 deaths from the disease occurred on the 8th inst. in the neighbouring commune of Palavas.

## TEN YEARS' GROWTH OF LONDON.

THE detailed Census Report, of which the second volume has just appeared, is full of matter that suggests reflection, although the broad results are not at this moment new. The great fact which will attract universal attention is the growth of the cities, and especially of London and its neighbourhood. We say *cities* rather than *towns* in this connexion because it is to the largest towns and great cities mainly that the vast accession of population has accrued, and, above all, to the metropolis. Yet the central parts of London are even losing population, and the great concentration—or rather condensation perhaps—is now taking place upon the periphery. We illustrated this point by a map which was published in THE LANCET of June 11th, 1892, showing the several registration districts of the metropolis, and indicating the growth which had taken place within them during a period of twenty years then past. As being of interest in the present connexion we have here reproduced the map, in which the very black shading represents an increase of population exceeding one in four during the twenty years, the intermediate shading an increase of less than one in four, the light shading a stationary population, and the blank spaces districts in which the population had actually diminished during the period under review.

It is not possible, however, to understand the facts as to the growth of London by considering only what is taking place within the limits drawn by Act of Parliament, for London has, in fact, outgrown its boundaries and is now spreading with greatest activity upon the belt of territory which lies adjacent to it. The metropolitan area is surrounded by the sanitary districts of Edmonton, West Ham, Dartford, Bromley, Croydon, Kingston, Richmond, Brentford, Hendon and Barnet, in every one of which there has been growth, and in some most remarkable growth, during the past decade. The reason of this expansion is manifestly that all are more or less suburban and have received the overflow of the population of the metropolis. The most remarkable development has been in the districts of Edmonton and West Ham, which lie upon the north-eastern boundary. These two districts taken together have added nearly 87,000 to their population since the census of 1881. Another large development has taken place in Croydon, where little short of 31,000 is the extent of the addition made to the population within the same period. Not less remarkable has been the expansion of the urban sanitary districts which lie contiguous to the metropolis, which have, indeed, been substantially incorporated into its suburbs. Here, again, the greatest activity is manifest in the north-east, where Leyton has added 36,000, Tottenham nearly 35,000 and Walthamstow upwards of 24,000, in all 95,000 souls, in addition to the 87,000 already attributed to Edmonton and West Ham. Thus we have at this one corner of the metropolis an increase of population to the number of upwards of 180,000 within the decade. Taking what may be called the suburban growth of London beyond its own boundary, we have in the aggregate: urban districts, 283,000; rural districts, 172,000; in all 455,000. This, then, is the component which the official enumeration of Londoners neglects and which those who desire to appreciate the real growth of the metropolis must take specially into account. The census return discloses an increase within the statutory limits of 396,000, so that the effective London of to-day is more populous by upwards of 800,000 than the London of ten years ago. It is very wonderful, but to what is it tending?

## REPORT OF THE ARMY MEDICAL DEPARTMENT FOR 1891.

### I.

THE Army Medical Department Report for 1891 has been just presented to Parliament. It is a voluminous and closely printed report of over 400 pages, and it would be impossible to deal with it in any adequate way without further examination than we have been able to give to it at present. We find that the average strength of the troops serving at home and abroad in 1891, as computed from the returns received by the Army Medical Department, was 196,270 warrant officers, non-commissioned officers and men (exclusive of colonial corps). The admissions into hospital in this force were 193,591 and the deaths 1808. The rates represented by these numbers are for admissions into hospital 986·3 and for deaths 9·13 per 1000 of the average annual strength, the latter being calculated on a strength of 197,946, which includes detached men. In looking over the table of ratios for 1891 we find that the death-rate amongst the troops in the United Kingdom was 4·94 per 1000, as against that of 5·97 from 1881 to 1890. Cyprus had a death-rate of only 3·61 and Bermuda one of 3·12 per 1000 in 1891, and the death-rates of Gibraltar and the Straits Settlements were slightly less than that amongst the troops serving at home during the same year. On the other hand the death-rate amongst the troops serving in the Mauritius was 25·86 per 1000, but as the average strength at that station is a small one ratios are liable to fluctuations and lose their value unless extended over long periods. The death-rate in the force serving in India in 1891 was 16·36, as against 14·79 per 1000 from 1881 to 1890. The West Indies had a death-rate of 13·69 in 1891, as against 14·52 per 1000 from 1881 to 1890. The death-rate amongst the troops serving in Egypt was only 7·25 in 1891, as against that of 28·80 for the previous eight years, from 1883 to 1890, during which period the circumstances, however, were widely different.

Amongst the papers in the appendix to the report which are of more professional and general interest, we may notice one on the progress of hygiene for the year 1892 by Brigade-Surgeon Lieut.-Colonel J. Lane Notter, the Professor of Military Hygiene at Netley. A list of operations at the Royal Victoria Hospital in 1892 by Brigade-Surgeon-Lieut.-Colonel W. F. Stevenson, the Professor of Military Surgery at the Army Medical School; and a Report on a Mission to Paris in April 1892 to attend the sixth session of the French Surgical Congress, by Brigade-Surgeon-Lieut.-Colonel C. E. Harrison, of the Grenadier Guards.

FEVER HOSPITAL FOR CROYDON.—The Croydon County Council has resolved to erect a fever hospital, at an estimated cost of £23,000.

## HOUSING OF THE POPULATION IN ENGLAND AND WALES.

THE Census Report for 1891 includes, for the first time, definite statistics bearing upon the housing of the population in England and Wales. The Census (England and Wales) Act, 1890, provided that the Householders' Schedule should state "where the occupier is in occupation of less than five rooms, the number of rooms occupied by him," and the result of this provision is now published in Volume II. of the detailed Census Report, which has recently been issued. It has been urged that the value of this information is to a large extent destroyed by the difficulty which must have been experienced by a considerable proportion of the imperfectly educated occupiers in satisfactorily and uniformly defining what constituted a "room." Bearing in mind the natural tendency of all classes to put the most liberal and favourable construction on any facts throwing light upon their social position, it may be admitted as probable that in not a few cases larders, sculleries, washhouses and various other kinds of outhouses, or sub-divisions of houses, may have been classified as "rooms," and have been so returned in the householders' schedules. The census figures bearing upon this subject would probably therefore give a somewhat too favourable return of the housing of the English population. There appears, however, no sufficient ground to believe that this source of error in the returns is likely to have been greater in one locality than in another, in which case the figures possess undoubted value for comparative purposes, and afford for the first time to the various sanitary authorities of England and Wales authoritative and official information as to the way in which the populations under their charge are housed. A summary table in the second volume of the report just issued shows that of the 6,131,001 tenements (held at the date of the census by separate occupiers) 3,205,705, or 52·3 per cent. of the whole, consisted of houses or parts of houses with less than five rooms; the remainder, or 47·7 per cent., consisting of houses or parts of houses with five or more rooms. The 52·3 per cent. of tenements with less than five rooms included the following proportions of tenements of one, two, three and four rooms respectively: 4·7 per cent. of one room, 11·4 of two rooms, 12·3 of three rooms and 23·9 per cent. of four rooms. It need scarcely be pointed out that one of the main uses of these statistics is to afford the means for testing and comparing the relative room-density of the English population and for ascertaining where the density amounts to overcrowding detrimental to health. It is not, however, quite clear how the prevalence of such overcrowding may best be determined from these census figures. The summary table shows, for instance, that in England and Wales on the census night in 1891 there were 286,946 occupiers of single rooms, but in 106,671 of these single-room tenements only one person slept on the census night. It is obvious that no charge of overcrowding can fairly be made with regard to these 106,671 single-room tenements; it is, however, equally obvious that such a charge is clearly proved with regard to the rather more than 3000 single-room tenements in which seven or more inmates were returned on the census night. Between the single-room tenements with one inmate and those with seven or more inmates the table shows more than 175,000 tenements with numbers of inmates ranging from two to six. We shall await with interest the publication of the final Census Report in which these figures and their indication of overcrowding will doubtlessly be discussed. In the meantime, however, we can but impress upon all sanitary authorities the importance of this new feature in the Census statistics just issued. It may moreover be pointed out that these tenement statistics are not only given for England and Wales as a whole, but also for each urban and rural sanitary district and for each registration county.

POPLAR HOSPITAL.—In aid of the building fund to defray the cost incurred by the extension of this hospital, the Admiralty has granted permission for a public inspection to be made of the new first-class cruiser *Theseus*. On the 5th inst. the Lord Mayor formally opened the ship for the above purpose and in doing so spoke of the success which had attended the Mansion House Fund in connexion with the *Victoria* disaster. He hoped that the promoters of the fund for the benefit of the Poplar Hospital would be rewarded by a similar if less striking result.

# Public Health and Poor Law.

## LOCAL GOVERNMENT DEPARTMENT.

### REPORTS OF MEDICAL OFFICERS OF HEALTH.

*Warwickshire County Sanitary District.*—Dr. Bostock Hill's annual report takes the form of a summary of the reports for the various districts, coupled with a short account of the sanitary condition of the county. Notification of infectious disease is now nearly general throughout the district, but there are still two rural and two urban authorities who have to join the list before the county is complete in that respect. It is somewhat remarkable that a town like Rugby should decline to adopt the Notification Act. During 1892 the Warwick sanitary authority took action, under the Rivers Pollution Act, 1876, against the Corporation of Coventry and obtained an injunction against them for polluting the Rivers Sherbourne and Sow. It appears that although a table asking for details with regard to the work done by the inspector of nuisances was forwarded to the various sanitary authorities by the County Council, in some instances this was not filled up and returned. Warwickshire is not the only county which has had difficulty in this respect; but it will probably be found that, if those which are sent in are published, in a short time the omissions will cease. Amongst the statistical tables in the appendix of the report we notice a return showing the number of children vaccinated in each district of the county. It would be a good thing, we think, if the annual report of every medical officer of health contained a somewhat similar table. For the past year the death-rate of typhoid fever for the county was 0·10 per 1000 persons living and that of diphtheria 0·08. The infantile mortality was 132 per 1000 births. In the urban districts the rate was 142 and the rural 121. Where hospital accommodation is provided isolation seems to be well carried out. There are, however, some exceptions—i.e., in Aston Manor urban district and in the Atherston and Solihull rural districts.

*Birkenhead Urban Sanitary District.*—This borough has at the present time an estimated population of 101,264 and the number of persons per acre varies from 5·54 to 46·27 in the different townships. The death-rate in the most sparsely populated township during 1892 was 7·29 and that in the densest populated township 21·01. The infantile mortality for the whole borough was 168 per 1000 registered births. In several cases in which meat was condemned as affected with tuberculosis the butchers expressed doubts as to the decision. In consequence of this Dr. Sydney Marsden obtained Mr. Kanthack's assistance and the existence of tubercle bacilli was demonstrated in some instances, whilst in others the inoculation of guinea-pigs substantiated the opinion of the medical officer of health. The scheme for the erection of a new fever hospital seems to proceed somewhat slowly; but acting upon Dr. Marsden's recommendation, the sanitary authority have decided to admit patients free into the present isolation hospital. It was formerly the custom to make a charge of 14*s* per week, and a guarantee of payment was asked for before admission. The charges naturally acted as a deterrent to many of the cases which it was most desirable to isolate. Certain sections of the Infectious Diseases (Prevention) Act, 1890, have been adopted, but the sanitary authority apparently did not feel equal to undertaking the responsibilities conferred by Section 15 in reference to the provision of temporary shelter for persons whilst their rooms were being disinfected. It is very obvious that under certain conditions proper disinfection of rooms is impossible unless some provision of the kind referred to be made.

*Bristol Urban Sanitary District.*—In discussing the sewerage and drainage of Bristol, Dr. D. S. Davies tells us that all the street gullies are trapped and the sewers without any external opening or means of ventilation. It would have been very acceptable had the report afforded us some of the reasons why ventilation of sewers is not considered necessary in Bristol, and we hope Dr. Davies will see his way to giving his readers a short account of the circumstances next year. It would be of considerable interest to hear, for instance, whether the house drains or street gullies of the higher parts of the town are often forced by the pressure of the sewer air, because although we gather from the report before us that the drains of all new houses, as also of the older ones

when reconstruction becomes necessary, are required to be trapped off from the sewers and ventilated in accordance with modern ideas, there are probably many houses in a place like Bristol, where nothing but a trap intervenes between the house drains and the sealed sewer. No doubt things have changed since 1869, but we see on referring to Dr. Corfield's "Treatment and Utilisation of Sewage" that in that year, according to Mr. Snead Brown, "sewer-gases certainly find their way into houses, especially in the upper parts of Clifton," and that he speaks of "being startled by an eruption of sewer-gases which permeated the house with their faint, sickly odour and made themselves particularly perceptible when the kitchen-range was heated." An extensive site for a fever hospital has now come into the possession of the sanitary authority and an administration block is to be erected to supply the wants of 220 patients. It is proposed now to erect accommodation for 110 beds and to add other wards as occasions demand. As an instance of the enormous development of disinfecting work in the borough it may be mentioned that in 1884 a total of 3919 articles were disinfected, whilst in 1892 the number amounted to no less than 36,722. During last year a case of acute diarrhœa occurred in the district, which apparently presented a strong resemblance to Asiatic cholera and which naturally caused some anxiety. There is little doubt that cases do sometimes occur which, clinically regarded, are undistinguishable from Asiatic cholera, and yet which, as regards their bacteriological and etiological aspects, are quite distinct from it. Cases such as these are certainly startling when they occur at a seaport town during the prevalence of cholera abroad. Dr. Davies appends to his annual report a special report on cholera precautions, a subject which his experience during the cholera survey of 1885-86 renders him in an exceptional degree well fitted to advise upon.

*Worcester Urban Sanitary District.*—It appears from Dr. Mabyn Read's annual report that the authorities of public libraries do not trouble themselves much about the question of the possibility of infection by conveyance through the agency of books. Dr. Read having had brought to his notice the fact that a person suffering from scarlet fever was using one of the library books, brought the matter under the notice of the library committee, who proceeded to draw up rules dealing with the subject. The librarian wrote to several towns asking for copies of regulations &c. as regards this, but was unable to ascertain that any existed. As showing the need of greater isolation accommodation at the fever hospitals, the report states that out of 62 cases admitted during September, October and November certified as suffering from scarlet fever, 5 were erroneously diagnosed. The by-laws with regard to common lodging-houses have recently been revised, and regulations under the Dairies, Cowsheds and Milkshops Order have also been adopted. In some of the bakehouses in the district ovens, in which the stoking is done outside, have been provided. This arrangement certainly adds greatly to the comfort and cleanliness of a bakehouse. The general death-rate of the district amounted to 22·5 per 1000 last year and the infantile mortality to 164.

*Salford Urban Sanitary District.*—In giving an account of the isolation of infectious disease in the borough during 1892 Mr. Charles Paget points out that there were thirty-one cases, or 4·3 per cent. of the total admissions into hospital, erroneously diagnosed. In the preceding year the percentage amounted to 7·5. The new fever hospital—the Ladywell Sanatorium—was opened in June of last year and apparently is much appreciated by the ratepayers. The population of Salford, estimated to the middle of 1892, was 201,058. The general death-rate for the year was 24·6 and the district mortality rates varied from 17·8 in Broughton to 33·1 in Greengate; the density of these two districts being 27 and 116·8 persons per acre respectively. The infantile mortality was 186 per 1000 births and the phthisis mortality rate was 1·9 per 1000 of the population. With regard to phthisis the corporation have adopted the memorandum of the North-Western Branch of the Society of Medical Officers of Health and have sent copies to every medical practitioner in Salford. The health committee have also resolved to disinfect any house free of cost upon the certificate of a medical practitioner. This active committee have, it appears, passed a resolution in favour of the notification of measles, and we hope soon to hear that it has been carried into effect. There is, however, a considerable amount of discredit brought upon the notification of measles by the somewhat reckless and ill-considered manner in which it is often adopted by sanitary authorities. To properly reap the advantages which may be reasonably expected to accrue from notification addition, must first be made not only to the isolation accommodation but also to the staff of the sanitary authority. For instance, Mr. Paget estimates that there must have been some 6000 cases of measles in the borough last year. If there is any advantage to be derived from notification it is obvious that, whether or not it is proposed to isolate, an addition to the staff is necessary. There were five cases of typhus fever notified in Salford during 1892, and it is interesting to read that three of these occurred in a house situated in an area condemned under the Housing of the Working Classes Act, 1890. Last year, during the threatened invasion of England by cholera, a large amount of inspection of the poorer districts was carried out by a series of subcommittees of the Health Committee. Mr. Paget has issued with his complete report three spot maps of the distribution of scarlet fever, diphtheria and enteric fever in the borough.

*Derby Urban Sanitary District.*—The hospital provision in this district proved to be inadequate during the past year and no less than 35 cases had to be refused admission, whilst in 43 cases admission was delayed. As one of the results of this it has been determined to erect another pavilion for twenty beds. Unfortunately, however, this will not place the borough in any better position as regards isolation accommodation than it was before, since the governors of the Royal Infirmary, where hitherto provision for twenty cases of scarlet fever has existed, have now resolved to take in no more after the end of the present year. It appears that during 1892 a considerable number of patients at the Royal Infirmary contracted scarlet fever and it is owing to this fact that the governors have felt obliged to discontinue their former practice. Under these circumstances the only reasonable course would seem to be the addition of yet another pavilion to the present isolation accommodation of the district. Mr. W. Iliffe, in discussing the advantage of isolation and the difficulty of its being properly carried out at homes, mentions a very interesting point—i.e., that 94 houses in which scarlet fever had occurred were declared to be free from infection within six weeks of the date of notification. Of this number 15 were certified within three weeks, 16 within four weeks and 31 within five weeks of notification. Without criticising these figures we may state that we are in entire accord with Mr. Iliffe when he says "the fact that such short intervals are allowed is a very strong argument against scarlet fever cases remaining at home." The report before us states that the dairies, cowsheds and milk shops order is not in force in the borough owing to the fact that regulations drawn up by the Sanitary Committee have not received the sanction of the Local Government Board. We would remind Mr. Iliffe that the order referred to is in force in all districts, whether regulations be sanctioned or not, and that it is incumbent upon all sanitary authorities to carry out its provisions. The regulations are only supplementary to the order.

*Eastbourne Urban Sanitary District.*—Dr. Reginald Dudfield, in presenting his first annual report of this district, expresses his regret that the borough is not an independent sub-registration district and suggests that a joint representation made by the corporation and the board of guardians might effect an alteration. In comparing the disinfection of premises carried out by the officials of the sanitary authority with that done by the occupiers Dr. Dudfield tells us that where removal and disinfection have been carried out by the officials no second case has occurred, whereas where official assistance has been declined four recurrences of the disease have taken place. Although perhaps, as the report before us points out, there is no power to enable the officials to undertake disinfection without consent, there is nevertheless a very considerable power given to sanitary authorities under Section 5, Subsections 1 and 3, of the Infectious Diseases (Prevention) Act, 1890, by which, where disinfection is not done by the sanitary authority, it must be performed to the satisfaction of the medical officer of health. During the year 1892, 56 per cent. of the notified cases of diphtheria, scarlet fever and enteric fever were removed to the borough sanatorium. Several complaints have recently been made with reference to smells from sewer gratings. Hitherto when complaints of a like nature have been received the grating has been closed, but Dr. Dudfield considers that this is a very undesirable proceeding. He advises that when gratings are closed ventilation columns should be erected. Probably, however, the fall is insufficient and the flush inadequate. The population of Eastbourne in the middle of 1892 was estimated at 37,168 and the corrected

death-rate for that year was 11·33. The infantile mortality amounted to 166 per 1000 births and the zymotic death-rate to 1·37.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6389 births and 4344 deaths were registered during the week ending Aug. 5th. The annual rate of mortality in these towns, which had been 25·1 and 22·6 per 1000 in the preceding two weeks, further declined last week to 21·9. In London the rate was 20·8 per 1000, whilst it averaged 22·8 in the thirty-two provincial towns. The lowest rates in these towns were 14·8 in Croydon, 15·1 in Bristol, 15·9 in Brighton and in Halifax and 16·6 in Huddersfield; the highest rates were 27·9 in Burnley and in Sunderland, 29·3 in Bolton, 29·9 in Blackburn, 30·8 in Liverpool and 34·1 in Preston. The 4344 deaths included 1116 which were referred to the principal zymotic diseases, against 1554 and 1257 in the preceding two weeks; of these, 695 resulted from diarrhœa, 115 from whooping-cough, 85 from measles, 77 from diphtheria, 67 from "fever" (principally enteric), 66 from scarlet fever and 11 from small-pox. The lowest death-rates from these zymotic diseases were recorded in Plymouth, Bristol, Swansea, Nottingham and Halifax, and the highest rates in Burnley, Hull, Bolton, Wolverhampton, Blackburn and Preston. The greatest mortality from measles occurred in Sheffield, Gateshead and Blackburn; from scarlet fever in Burnley; from whooping-cough in Norwich, Birkenhead and Gateshead; from "fever" in Derby and Norwich; and from diarrhœa in Sunderland, Bolton, Sheffield, Burnley, Hull, Blackburn, Wolverhampton and Preston. The 77 deaths from diphtheria included 64 in London, 5 in Manchester and 2 in Birmingham. Three fatal cases of small-pox were registered in London, 3 in West Ham, 3 in Bradford, 1 in Birmingham and 1 in Salford, but not one in any other of the thirty-three large towns; 246 cases of this disease were under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, against numbers declining from 570 to 280 at the end of the preceding twelve weeks; 40 new cases were admitted during the week, against 61, 53 and 38 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2944, against 2963 and 2966 on the preceding two Saturdays; 351 new cases were admitted during the week, against 390 and 282 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined from 252 to 182 in the preceding six weeks, rose again to 208 last week, and were 23 above the corrected average. The causes of 71, or 1·6 per cent., of the deaths in the thirty-three towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Oldham, Blackburn, and in six other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Leicester and Halifax.

### HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the preceding three weeks from 21·9 to 19·1 per 1000, further fell to 19·4 during the week ending Aug. 5th and was 2·5 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 15·4 in Perth and 16·8 in Leith, to 20·2 in Dundee and 24·1 in Paisley. The 546 deaths in these towns included 28 which were referred to diarrhœa, 20 to whooping-cough, 12 to measles, 8 to scarlet fever, 7 to "fever," 5 to diphtheria, and not one to small-pox; in all, 80 deaths resulted from these principal zymotic diseases, against 132 and 110 in the preceding two weeks. These 80 deaths were equal to an annual rate of 2·8 per 1000, which was 2·8 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had declined from 59 to 52 in the preceding three weeks, further fell to 28 last week, of which 14 occurred in Glasgow and 6 in Dundee. The 20 deaths referred to whooping-cough exceeded by 2 the number in the previous week, and included 13 in Glasgow. The fatal cases of measles which had been 24 and 20 in the preceding two weeks, further declined to 12 last week, of which 8 occurred in Glasgow and 3 in Edinburgh. The 8 deaths from scarlet fever showed an increase of 2 upon the number in the preceding week, and included 4 in Glasgow and 2 in Edinburgh. The fatal cases of "fever," which had been 5 and 9 in the preceding two weeks, declined again to 7 last week, of which 4 occurred in Paisley. Of the 5 deaths from diphtheria, 2 were recorded in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 77 and 78 in the preceding two weeks, were 80 last week, and slightly exceeded the number in the corresponding week of last year. The causes of 58, or nearly 11 per cent., of the deaths in these eight towns last week were not certified.

### HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 30·3 and 29·2 per 1000 in the preceding two weeks, further declined to 28·9 during the week ending Aug. 5th. During the past five weeks of the current quarter the death-rate in the city has averaged 28·0 per 1000, against 21·9 in London and 17·9 in Edinburgh. The 194 deaths registered in Dublin during the week under notice showed a decline of 2 from the number in the preceding week and included 41 which resulted from the principal zymotic diseases, against 45 and 43 in the preceding two weeks; of these, 27 were referred to diarrhœa, 5 to measles, 4 to whooping-cough, 2 to "fever," 2 to diphtheria, 1 to scarlet fever and not one to small-pox. These 41 deaths were equal to an annual rate of 6·1 per 1000, the zymotic death-rate during the same period being 4·9 in London and 2·3 in Edinburgh. The fatal cases of diarrhœa, which had been 36 and 35 in the preceding two weeks, further declined to 27 last week. The 5 deaths referred to measles exceeded the number recorded in any recent week. The fatal cases of whooping-cough, which had been 2 and 4 in the preceding two weeks, were again 4 last week. The 2 deaths from diphtheria corresponded with the number in the preceding week. The 194 deaths registered in Dublin last week included 58 of infants under one year of age and 50 of persons aged upwards of sixty years; the deaths of infants showed a decline, whilst those of elderly persons showed a marked increase upon recent weekly numbers. Seven inquest cases and four deaths from violence were registered; and 63, or nearly a third, of the deaths occurred in public institutions. The causes of 9, or nearly 5 per cent., of the deaths in the city last week were not certified.

### VITAL STATISTICS OF LONDON DURING JULY, 1893.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality during July in each of the forty-one sanitary districts of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases in the accompanying table was equal to 19·3 per 1000 of the population, estimated at 4,305,551 persons in the middle of this year. In the preceding three months the rates were respectively 10·5, 13·5, and 18·1 per 1000. Amongst the various sanitary districts the rates last month were considerably below the average in St. James Westminster, Chelsea, Fulham, Hampstead, St. Giles, St. Martin-in-the-Fields, City of London, and Woolwich, while they showed the largest excess in St. Pancras, Holborn, Clerkenwell, Bethnal Green, Whitechapel, Poplar, Mile End Old Town, and Newington. The prevalence of small-pox in London showed a further marked decline during July, an average of 61 cases weekly being notified, against 134 and 89 in the preceding two months; of the 245 cases notified during last month, 38 belonged to Battersea, 17 to Lambeth, 17 to Bethnal Green, 15 to Mile End Old Town, 14 to Camberwell, and 13 to Hackney sanitary districts. The Metropolitan Asylum Hospitals contained 255 small-pox patients at the end of July, against 516 and 371 at the end of the preceding two months; the weekly admissions averaged 50, against 117 and 75 in the preceding two months. The prevalence of scarlet fever in London showed a further marked increase upon that recorded in recent months; this disease was proportionally most prevalent in St. George Hanover-square, St. Pancras, Hackney, Holborn, Clerkenwell, Bethnal Green, Whitechapel, Mile End Old Town, and St. George Southwark sanitary districts. The Metropolitan Asylum Hospitals contained 2800 scarlet fever patients at the end of July, against

## MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON.—JULY, 1893.

*(Specially compiled for* THE LANCET.)

| Sanitary areas. | Estimated population in the middle of 1893. | Notified Cases of Infectious Disease. | | | | | | | | | | | Deaths from Principal Infectious Diseases. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Small-pox. | Scarlet fever. | Diphtheria.* | Typhus fever. | Enteric fever. | Other continued fevers. | Puerperal fever. | Erysipelas. | Cholera. | Total. | Annual rate per 1000 persons living. | Small-pox. | Measles. | Scarlet fever. | Diphtheria.† | Whooping-cough. | Typhus fever. | Enteric fever. | Other continued fevers. | Diarrhœa. | Total. | Annual rate per 1000 persons living. | Deaths from all causes. | Death-rate per 1000 living. | Deaths of infants under one year to 1000 births. |
| **LONDON** | 4,305,551 | 245 | 3671 | 1172 | 2 | 282 | 16 | 35 | 749 | 10 | 6382 | 19·3 | 30 | 197 | 141 | 241 | 209 | — | 50 | 2 | 944 | 1814 | 5·5 | 7199 | 21·8 | 269 |
| *West Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Paddington | 120,277 | 4 | 117 | 29 | — | 2 | 1 | — | 18 | — | 171 | 18·5 | — | 7 | 4 | 5 | 7 | — | 1 | — | 19 | 43 | 4·7 | 164 | 17·8 | 290 |
| Kensington | 167,038 | 4 | 104 | 50 | — | 3 | — | — | 24 | — | 185 | 14·4 | 1 | — | 3 | 11 | 8 | — | 1 | — | 27 | 51 | 4·0 | 242 | 18·9 | 313 |
| Hammersmith | 103,674 | 1 | 84 | 38 | — | 7 | — | 1 | 19 | — | 150 | 18·9 | — | — | 3 | 7 | 4 | — | — | — | 21 | 35 | 4·4 | 139 | 17·5 | 237 |
| Fulham | 103,075 | 1 | 58 | 11 | — | 6 | — | 1 | 12 | — | 89 | 11·3 | — | 3 | 3 | 5 | 6 | — | — | — | 42 | 59 | 7·5 | 168 | 21·2 | 301 |
| Chelsea | 98,114 | 2 | 55 | 22 | — | 3 | — | 2 | 12 | — | 96 | 12·8 | — | 4 | 4 | 6 | 4 | — | — | — | 23 | 41 | 5·4 | 160 | 21·3 | 288 |
| St. George Hanover-square | 75,825 | 2 | 81 | 14 | — | 6 | 1 | 1 | 6 | — | 111 | 19·1 | — | — | 1 | 3 | — | — | — | 1 | 7 | 12 | 2·1 | 93 | 16·0 | 227 |
| Westminster | 54,761 | — | 42 | 14 | — | 2 | — | — | 10 | — | 68 | 16·2 | 1 | — | 5 | 3 | 3 | — | 1 | — | 15 | 28 | 6·7 | 92 | 21·9 | 402 |
| St. James Westminster | 23,873 | 6 | 7 | 3 | — | 1 | — | — | 1 | — | 18 | 9·8 | — | 1 | — | 3 | — | — | — | — | — | 4 | 2·2 | 32 | 17·5 | 91 |
| *North Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Marylebone | 139,546 | 12 | 112 | 26 | — | 4 | — | 1 | 23 | — | 178 | 16·6 | — | 1 | 8 | 2 | 7 | — | 2 | — | 23 | 43 | 4·0 | 247 | 23·1 | 205 |
| Hampstead | 73,949 | 1 | 47 | 4 | — | 6 | 1 | 6 | — | — | 65 | 11·5 | — | 1 | — | 2 | 1 | — | — | — | 5 | 9 | 1·6 | 54 | 9·5 | 98 |
| St. Pancras | 234,025 | 5 | 322 | 77 | — | 10 | 2 | 46 | 1 | 463 | 25·8 | 2 | 11 | 11 | 18 | 13 | — | 2 | — | — | 43 | 100 | 5·6 | 421 | 23·4 | 295 |
| Islington | 328,608 | 5 | 284 | 59 | — | 19 | 2 | 54 | — | 423 | 16·8 | 2 | 16 | 4 | 13 | 26 | — | 2 | — | — | 68 | 131 | 5·2 | 522 | 20·7 | 242 |
| Hackney | 240,177 | 13 | 249 | 50 | — | 33 | — | 2 | 27 | 1 | 375 | 20·4 | 2 | 1 | 9 | 8 | 15 | — | 3 | — | 54 | 92 | 5·0 | 383 | 10·8 | 283 |
| *Central Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| St. Giles | 38,511 | 6 | 17 | 9 | — | — | — | — | 3 | — | 35 | 11·8 | — | 1 | 1 | 2 | 1 | — | — | — | 6 | 11 | 3·7 | 69 | 23·4 | 127 |
| St. Martin-in-the-Fields | 18,911 | — | 11 | 1 | — | — | — | — | 3 | — | 15 | 14·1 | — | 1 | 1 | 1 | — | — | 1 | — | 1 | 5 | 4·7 | 27 | 25·3 | 47 |
| Strand | 23,508 | 2 | 17 | 6 | — | — | — | — | 2 | — | 27 | 15·0 | — | — | — | 3 | 2 | — | — | — | 3 | 8 | 4·4 | 43 | 23·8 | 229 |
| Holborn | 32,646 | 2 | 52 | 8 | — | 3 | — | 1 | 7 | — | 73 | 29·1 | — | 2 | 3 | 3 | — | — | 1 | — | 7 | 16 | 6·4 | 59 | 23·6 | 340 |
| Clerkenwell | 65,163 | 2 | 91 | 29 | — | 6 | 1 | — | 20 | — | 149 | 29·8 | — | 20 | 8 | 4 | 2 | — | 1 | — | 22 | 57 | 11·4 | 146 | 29·2 | 335 |
| St. Luke | 41,476 | 1 | 39 | 14 | — | 3 | — | — | 12 | — | 69 | 21·7 | — | 15 | 4 | 5 | 5 | — | 2 | — | 8 | 39 | 12·3 | 120 | 37·8 | 292 |
| City of London | 35,383 | — | 16 | 5 | — | 2 | — | — | 5 | — | 28 | 10·3 | — | — | — | 3 | — | — | — | — | 2 | 5 | 1·8 | 63 | 23·2 | 121 |
| *East Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shoreditch | 123,425 | 2 | 83 | 50 | — | 13 | — | 3 | 21 | — | 172 | 18·2 | — | 22 | 5 | 18 | 3 | — | 2 | 1 | 43 | 94 | 9·9 | 242 | 25·6 | 275 |
| Bethnal Green | 129,655 | 17 | 169 | 78 | — | 11 | — | 3 | 36 | — | 304 | 30·6 | 2 | 2 | 5 | 12 | 3 | — | 3 | — | 34 | 61 | 6·1 | 248 | 24·9 | 260 |
| Whitechapel | 75,163 | 3 | 118 | 25 | — | 2 | — | — | 14 | — | 162 | 28·1 | — | 1 | 2 | 3 | 1 | — | — | — | 11 | 18 | 3·1 | 143 | 24·8 | 255 |
| St. George-in-the-East | 45,182 | 2 | 39 | 21 | — | 1 | — | 1 | 8 | 1 | 73 | 21·1 | — | 4 | 2 | 3 | — | — | — | — | 22 | 31 | 8·9 | 108 | 31·2 | 387 |
| Limehouse | 67,386 | 5 | 39 | 18 | 1 | 11 | — | 2 | 19 | — | 95 | 21·6 | 2 | 1 | 1 | 4 | 2 | — | 1 | — | 21 | 32 | 7·3 | 127 | 28·9 | 358 |
| Mile End Old Town | 108,006 | 15 | 129 | 33 | — | 15 | — | — | 18 | — | 210 | 25·3 | — | 7 | 7 | 6 | 4 | — | 4 | — | 40 | 68 | 8·2 | 215 | 26·0 | 295 |
| Poplar | 168,876 | 12 | 154 | 108 | — | 43 | 4 | — | 45 | — | 366 | 28·2 | — | 3 | 8 | 14 | 7 | — | 7 | — | 57 | 96 | 7·4 | 345 | 26·6 | 376 |
| *South Districts.* | | | | | | | | | | | | | | | | | | | | | | | | | | |
| St. Saviour Southwark | 26,823 | 1 | 17 | 7 | — | 3 | — | 2 | 2 | — | 30 | 14·6 | — | 1 | 1 | — | — | — | 1 | — | 1 | 4 | 1·9 | 43 | 20·9 | 121 |
| St. George Southwark | 59,962 | 5 | 83 | 9 | 1 | 3 | — | 2 | 8 | — | 111 | 24·1 | 2 | 6 | 7 | 3 | 8 | — | — | — | 13 | 39 | 8·5 | 123 | 26·7 | 277 |
| Newington | 117,430 | 7 | 130 | 44 | — | 5 | — | 1 | 37 | — | 224 | 24·9 | 1 | 6 | 4 | 8 | 11 | — | 2 | — | 31 | 63 | 7·0 | 235 | 26·1 | 197 |
| St. Olave Southwark | 12,861 | — | 10 | — | — | — | — | — | 4 | — | 14 | 14·2 | — | — | — | — | — | — | — | — | 4 | 4 | 4·1 | 28 | 28·4 | 214 |
| Bermondsey | 84,244 | 3 | 62 | 20 | — | 2 | — | — | 16 | — | 103 | 15·9 | 1 | 6 | 2 | 4 | 2 | — | — | — | 17 | 32 | 5·0 | 132 | 20·4 | 226 |
| Rotherhithe | 39,764 | 9 | 22 | 13 | — | 4 | — | 1 | 14 | — | 63 | 10·7 | 1 | — | 1 | 5 | 4 | — | — | — | 5 | 16 | 5·2 | 81 | 26·6 | 246 |
| Lambeth | 280,567 | 17 | 292 | 69 | — | 10 | 7 | 2 | 52 | 6 | 455 | 21·1 | 3 | 6 | 6 | 11 | 11 | — | 4 | — | 62 | 103 | 4·8 | 454 | 21·1 | 222 |
| Battersea | 160,633 | 38 | 122 | 57 | — | 7 | — | 2 | 32 | — | 258 | 20·9 | 7 | 3 | 4 | 8 | 6 | — | 1 | — | 35 | 64 | 5·2 | 236 | 19·2 | 297 |
| Wandsworth | 169,379 | 6 | 142 | 43 | — | 9 | 2 | 2 | 57 | — | 241 | 18·5 | — | 9 | 3 | 11 | 21 | — | 1 | — | 37 | 82 | 6·3 | 268 | 20·6 | 296 |
| Camberwell | 246,837 | 14 | 169 | 43 | — | 12 | — | — | 34 | — | 272 | 14·4 | 1 | 19 | 5 | 10 | 12 | — | 2 | — | 50 | 99 | 5·2 | 387 | 20·4 | 267 |
| Greenwich | 173,349 | 10 | 129 | 38 | — | 5 | — | 1 | 28 | — | 211 | 15·9 | 1 | 8 | 2 | 10 | 4 | — | 3 | — | 32 | 60 | 4·5 | 288 | 21·7 | 256 |
| Lewisham (excluding Penge) | 76,593 | — | 69 | 8 | — | 3 | — | — | 5 | — | 85 | 14·5 | — | 4 | — | — | — | — | 1 | — | 10 | 15 | 2·6 | 89 | 15·1 | 217 |
| Woolwich | 41,794 | 4 | 28 | 1 | — | 1 | — | — | 2 | 1 | 37 | 11·5 | 1 | 3 | — | — | 5 | — | 1 | — | 10 | 20 | 6·2 | 60 | 18·7 | 198 |
| Plumstead | 94,192 | 6 | 70 | 18 | — | 5 | — | 1 | 7 | — | 107 | 14·8 | — | 2 | 4 | 4 | 1 | — | — | — | 13 | 24 | 3·3 | 103 | 14·3 | 212 |
| Port of London | — | — | — | — | — | 1 | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

* Including 44 cases of membranous croup

† Including deaths from membranous croup.

2024, 2511, and 2653 at the end of the preceding three months; the weekly admissions averaged 321, against 219, 309, and 282 in the preceding three months. Diphtheria showed slightly decreased prevalence during the month under notice; amongst the various sanitary districts this disease showed the highest proportional prevalence in Hammersmith, Clerkenwell, Shoreditch, Bethnal Green, St. George-in-the-East, Poplar, Newington, and Battersea. There were 293 cases of diphtheria under treatment in the Metropolitan Asylum Hospitals at the end of July, against 302, 296, and 295 at the end of the preceding three months; the weekly admissions averaged 60, against 61, 64 and 70 in the preceding three months. Enteric fever was proportionally most prevalent during July in Hackney, Clerkenwell, Shoreditch, Limehouse, and Mile End Old Town sanitary districts. The Metropolitan Asylum Hospitals contained 104 enteric fever patients at the end of July, against 38 and 86 at the end of the preceding two months; the weekly admissions averaged 16, against 6 and 22 in the preceding two months. Erysipelas showed the highest proportional prevalence in Clerkenwell, St. Luke, Bethnal Green, Limehouse, Poplar, Newington, and Rotherhithe sanitary districts. Three cases of puerperal fever were notified during July in Shoreditch and 3 in Bethnal Green sanitary districts.

The mortality statistics in the accompanying table relate to the deaths of persons actually belonging to the various metropolitan sanitary districts, the deaths occurring in the institutions of London having been distributed among the various sanitary districts in which the patients had previously resided. The distribution of these deaths, and especially of those resulting from zymotic diseases, affords the most trustworthy data that can be secured upon which to calculate reliable rates of mortality. During the four weeks ending Saturday, July 29th, the deaths of 7199 persons belonging to London were registered, equal to an annual rate of 21·8 per 1000, against 17·7 and 20·1 in the preceding two months. The lowest death-rates during July in the various sanitary districts were 9·5 in Hampstead, 14·3 in Plumstead, 15·1 in Lewisham (excluding Penge), 16 0 in St. George Hanover-square, 17 5 in Hammersmith and in St. James Westminster, and 17·8 in Paddington; in the other sanitary districts the rates ranged upwards to 26·6 in Poplar and in Rotherhithe, 26·7 in St. George Southwark, 28·4 in St. Olave Southwark, 28 9 in Limehouse, 29·2 in Clerkenwell, 31 2 in St. George-in-the-East, and 37·8 in St. Luke. During the four weeks of July 1814 deaths were referred to the principal zymotic diseases in London; of these, 944 resulted from diarrhœa, 241 from diphtheria, 209 from whooping-cough, 197 from measles, 141 from scarlet fever, 52 from different forms of "fever" (including 50 from enteric fever and 2 from ill-defined forms of continued fever), and 30 from small-pox. These 1814 deaths were equal to an annual rate of 5·5 per 1000, against 2·1, 2·3, and 4·1 in the preceding three months. Amongst the various sanitary districts the lowest zymotic death-rates were recorded in St. George Hanover-square, St. James Westminster, Hampstead, City of London, St. Saviour Southwark, and Lewisham; and the highest rates in Fulham, Clerkenwell, St. Luke, Shoreditch, Mile End Old Town, Poplar, St. George-in-the-East, and St. George Southwark. Thirty fatal cases of small-pox were registered in London during the month under notice, being about double the corrected average in the corresponding periods of the preceding ten years; of these 30 deaths, 7 belonged to Battersea, 3 to Lambeth and 2 each to St. Pancras, Islington, Hackney, Bethnal Green, Limehouse, and St. George Southwark sanitary districts. The 197 deaths referred to measles were 39 below the average; amongst the various sanitary districts this disease showed the highest proportional fatality in Clerkenwell, St. Luke, Shoreditch, St. George-in-the-East, and Camberwell. The 141 fatal cases of scarlet fever were nearly double the corrected average number; this disease was proportionally most fatal in Westminster, Marylebone, Holborn, Clerkenwell, St. Luke, Mile End Old Town, Poplar, and St. George Southwark sanitary districts. The 241 deaths referred to diphtheria exceeded by as many as 150 the corrected average number; amongst the various sanitary districts this disease showed the highest proportional fatality in Kensington, Hammersmith, St. James Westminster, St. Pancras, St. Luke Shoreditch, Bethnal-green, Poplar, Newington, and Rotherhithe. The 209 fatal cases of whooping-cough slightly exceeded the average; this disease was proportionally most fatal in Islington, Hackney, St. Luke, St. George Southwark, Newington, Wandsworth, and Woolwich sanitary districts. The 52 deaths referred to different forms of "fever" almost corresponded with the corrected average number; amongst the various sanitary districts the highest "fever" death-rates were recorded in St. Luke, Mile End Old Town, and Poplar. The 944 fatal cases of diarrhœa were very slightly below the average; this disease showed the highest proportional fatality in Fulham, Clerkenwell, Shoreditch, St. George-in-the-East, Limehouse, Mile End Old Town, Poplar, and St. Olave Southwark sanitary districts. In conclusion, it may be stated that the mortality in London during July from these principal zymotic diseases was 13 per cent. above the average, owing principally to the excessive mortality from scarlet fever and diphtheria.

Infant mortality in London during the month under notice, measured by the proportion of deaths under one year to births registered, was equal to 269 per 1000, and considerably exceeded the average; the lowest rates of infant mortality were recorded in St. James Westminster, Hampstead, St. Giles, City of London, St. Saviour Southwark, St. Olave Southwark, Woolwich, and Plumstead; the highest rates occurred in Kensington, Fulham, Westminster, St. Martin-in-the-Fields, Holborn, Clerkenwell, St. George-in-the-East, Limehouse, and Poplar sanitary districts.

## THE SERVICES.

### MOVEMENTS IN THE MEDICAL STAFF.

SURGEON-CAPTAIN W. W. WEBB has been granted leave from Aug. 4th to Sept. 20th. Surgeon-Major A. E. Hayes, D.S.O., has leave from Aug. 1st to 20th. Surgeon-Colonel Churchill has resumed duty as Principal Medical Officer at Woolwich. Surgeon-Captain Kearney has been posted to the Home District. Surgeon-Colonel Robinson, Principal Medical Officer, Scottish District, has returned from leave of absence. Surgeon-Captain Braddel has been transferred from Sheffield to York and Surgeon-Lieutenant Hughes to Preston. Surgeon-Captain Wilson has arrived for duty in Belfast. Surgeon-Major Tidbury and Surgeon-Captain Hughes have re-embarked for Malta on return from leave. Surgeon-Major Galloway, Principal Medical Officer, Egyptian Army, has returned to Cairo from England. Surgeon-Colonel Archer has obtained leave from Halifax, Nova Scotia. Surgeon-Captain Dowman has rejoined at Dublin, and Surgeon-Major Tuckey at Aldershot. Surgeon-Captain Storey has arrived from India on leave.

### ARMY MEDICAL STAFF.

Sergeant-Major William Henry Barton, Medical Staff Corps, to be Quartermaster, with the honorary rank of Lieutenant, vice Honorary Captain H. Copping, retired.

### INDIA AND THE INDIAN MEDICAL SERVICES.

The following appointments are announced:—Brigade-Surgeon-Lieutenant-Colonel C. A. Atkins, Army Medical Staff, to be Administrative Medical Officer in the Bombay Presidency, in succession to Surgeon-Colonel Warren. Surgeon-Major A. Adams, M.D., I.M.S. (Madras), Residency Surgeon in the Western States of Rajputana, to officiate as Residency Surgeon and Chief Medical Officer in Rajputana, from date of assuming charge and during the absence of Brigade-Surgeon-Lieutenant-Colonel J. H. Newman, M.D., whose services have been placed temporarily at the disposal of the Home Department, or until further orders. Surgeon-Captain T. Grainger, to be Civil Surgeon of Khulna, but to continue to act as Civil Surgeon of Champaran until further orders. Surgeon-Captain F. A. Rogers, to be Civil Surgeon of Bogra, but to continue to act as Civil Surgeon of Rajshahi until further orders. Surgeon-Captain C. R. M. Green, to be Civil Surgeon of Manbhum, but to continue to act as Resident Surgeon of the Medical College Hospital until further orders. Surgeon-Captain T. C. Moore, to do duty at the General Hospital, Madras, as a temporary measure. Surgeon-Captain G. C. Hall, to be Additional Medical Officer, General Hospital, Madras, sub *pro tem.* Surgeon-Lieutenant-Colonel George Hutcheson, M.D., to be Brigade-Surgeon-Lieutenant-Colonel, vice Brigade-Surgeon-Lieutenant-Colonel G. G. MacLaren, retired. Surgeon-Lieutenant-Colonel Burnett, Indian Medical Service, has been transferred from Poona District to general duty, Sind District.

### NAVAL MEDICAL SERVICE.

The following appointments are announced:—Staff-Surgeon

William M. Lory to the *Fearless:* Surgeon John L. Aherne, B.A., to the *Volage.*

MILITIA MEDICAL STAFF.

Second Lieutenant William Moyle O'Connor, from the 1st Volunteer Battalion (the Royal Berkshire Regiment) to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

*Rifle:* 1st Tower Hamlets (the Tower Hamlets Rifle Volunteer Brigade): Francis James Warwick, M.B., to be Surgeon-Lieutenant.—1st Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon-Captain Sidney Wacher is appointed Captain.—1st Cinque Ports: Captain Atwood Thorne is appointed Surgeon-Lieutenant.

THE PUNJAB.

The *Indian Medical Record* says that the report of the Sanitary Commissioner of the Punjab for 1892 will contain some startling statistics on mortality; over a million deaths have been registered, excluding those which occurred in cantonments. In one month during last autumn the number of deaths reached 200,000 in the Punjab.

ENTERIC FEVER IN THE FRENCH ARMY.

We called attention some time ago, in connexion with the introduction of the Chamberland filter into the French army, to the official reports of the War Minister of that country as to the greatly reduced prevalence of enteric fever that had since then taken place. There is no doubt that whenever epidemic outbreaks of this disease occurred in French garrisons the water-supply was generally at fault. We hope and believe that it is intended to make an experimental trial of these filters in India. According to the Paris papers an outbreak of enteric fever has recently occurred in the 29th Battalion of Chasseurs, which has consequently been sent into camp at St. Maur.

VILLAGE SANITATION IN BENGAL.

Sir A. MacDonnell has taken up the very difficult question of rural sanitation in the Lower Provinces of Bengal. Apart from the ignorance of the people and their entire satisfaction with things as they are, there is the great obstacle of want of money, and the fact that district and local boards have not the power to deal with the situation. Sir A. MacDonnell says that the sanitary question in Bengal, in its various phases of silting up deltaic rivers, obstructed drainage, uncleanly towns and unhealthy villages, is the pressing question of the day, and the solution will not grow easier by being postponed. He calls public attention to the urgency of the matter and invites criticism as to the direction in which action can best be taken in regard to the provision of funds and the character of the sanitary improvements that most require to be effected. The *Pioneer Mail* suggests that some of the money now spent on the maintenance of main and village roads by the district boards might be better laid out in sanitary improvements and efforts to save the lives of the people.

EXAMINATIONS OF ARMY CANDIDATES.

It would have been thought that the exact nature and scope of these examinations, as well as the best method of procedure to be followed, would have been finally settled by this time, but such does not seem to be the case. We learn that a departmental committee is to sit at the War Office under the presidency of Lord Sandhurst, Under-Secretary of State for War, to inquire into the whole question of the qualifications of candidates for admission into the army. We do not know whether the examination of candidates for commissions in the medical staff is included in the committee's inquiry.

THE ARMY MEDICAL SERVICE AND THE HOUSE OF COMMONS.

We would call attention to the questions recently put to the Secretary of State for War in the House of Commons by Dr. Farquharson and Sir J. Leng respectively and of the War Minister's replies which are reported in our parliamentary columns. The first had reference to the many changes of principal medical officers in our large districts and garrisons, and the second to the army medical examinations. As regards the first no one can doubt that the frequent changes of principal medical officers is unpopular with different branches of the service and is detrimental to an efficient and comfortable working of the medical department, but it is very difficult to see how it is to be overcome. We are compelled to recognise the force of the War Minister's reply that so long as compulsory retirement for age and a roster for foreign service are maintained they appear to be unavoidable and preclude any fixed period for the tour of home service. As regards the selection of examiners for candidates seeking admission into the army medical service at the competitive examinations, the War Minister disclaimed all intention of restricting the selection, and added that the appointments of examiners are for four years only, and when a vacancy occurs it would be quite open for consideration whether the selection should not be made from Scottish or Irish Colleges, and this we imagine will be done. The best plan would probably be to have the board of examiners a mixed one and composed of representatives from the English, Irish and Scotch schools respectively, which would obviate all difficulty. As Mr. Macgregor has given notice that he will again call attention to the question on the Estimates it is probable, we think, that some such solution of the matter will be arrived at.

# Correspondence.

"Audi alteram partem."

## "THE ADDRESS IN SURGERY AT NEWCASTLE-ON-TYNE."

*To the Editors of* THE LANCET.

SIRS,—In your excellent leading article on Dr. Hume's Address in Surgery, delivered at the annual meeting of the British Medical Association, you say: "We all agree that Hunter was right when he wrote 'that primary healing takes place without inflammation,' and that in spite of certain close resemblances in the minute changes in the tissues the primary healing of a wound differs *toto cælo* from the process of inflammation, one being a physiological process, whilst the other is a pathological, morbid and destructive change." You then go on to point out the importance of this view of repair and inflammation in such words as I might have used, if I have not done so already, in my work on the "Practice of Surgery," and more recently in my Hunterian Oration of this year. It is pleasant to think that these views, which I alone have advocated and publicly taught for so many years, with what I have felt but little success, should suddenly seem to be accepted by surgeons generally. I hope this may be the case, and, at any rate, I am pleased to find that they have your powerful advocacy.—I am, Sirs, yours faithfully,

Grosvenor-street, W., Aug. 5th, 1893. THOMAS BRYANT.

## "DEATHS UNDER CHLOROFORM."

*To the Editors of* THE LANCET.

SIRS,—Thinking it very important that all deaths under chloroform should be reported in the medical papers I beg to enclose the details of a case which unfortunately occurred in this hospital on July 24th. A strong healthy man aged thirty-two was admitted into the London Hospital on July 19th with a backward dislocation of the fifth metacarpal bone. An unsuccessful attempt had been made to reduce it before admission, and being extremely anxious to resume his work again the patient was advised, and readily consented, to another attempt being made under chloroform. He was taken up to the operating theatre and I administered chloroform on a Skinner's inhaler. The heart had been previously examined and found to be perfectly sound. The patient was told to breathe in the usual way and he commenced by breathing quickly, but very shallowly. Very little—certainly not more than one drachm—chloroform had been used up to this stage, which lasted about two minutes; then, without a moment's notice, he commenced the most violent struggling and had to be forcibly held down; his chest, however, was not touched. During the struggling stage the tips of his ears became purple, and shortly afterwards the whole of his face quite livid, and during this time the patient held his breath for some considerable time—the diaphragm and respiratory muscles became, in fact, most rigidly contracted. The

inhaler was then removed and five or six inspirations of pure air allowed. The breathing then became regular and the chloroform was continued until the respiratory spasm had quite passed off and the corneæ became insensitive. The lividity, however, remained. Just before the operation was about to be commenced the breathing became extremely shallow, so shallow that it was thought advisable to perform artificial respiration at once without waiting for it to stop. This was done and at the same time the jaw was pushed well forwards and the tongue drawn out by forceps. Artificial respiration was continued for about two minutes and then a few apparently natural respirations followed. These soon subsided, however, and artificial respiration was at once recommenced. There was no pulse perceptible at the wrist when artificial respiration was commenced for the first time. As no sign of life returned brandy was injected subcutaneously, laryngotomy performed (artificial respiration still being continued), a tube inserted and the lungs inflated, and the thorax then compressed, so as to imitate as far as possible natural respiration. No signs of life returned and after half an hour all further attempts were abandoned as useless. A post-mortem examination was made on the following day. The lungs were found to be slightly œdematous and the kidneys congested, both sides of the heart were quite empty and the muscular substance was found to be flabby. Microscopically the fibres were shown to be somewhat granular. It should be mentioned that there was considerable oozing after death from the laryngotomy wound. The explanation of the cause of death in this case is difficult. As the lividity was such a marked, early and persistent symptom, it seems probable that the very violent struggling induced by the chloroform produced an asphyxial condition rapidly followed by syncope. In connexion with this unfortunate case a question might be raised—viz., whether it would not be advisable in strong, muscular subjects to lessen the risks attendant upon violent struggling and consequent asphyxia by a preliminary injection of morphia.

I am, Sirs, yours truly,

C. H. LEAF, M.B., B.C. CANTAB., M.R.C.S., &c.

The London Hospital, Aug. 8th, 1893.

## THE LOSS OF LIFE FROM PREVENTABLE DISEASE.

*To the Editors of* THE LANCET.

SIRS,—On reference to the Registrar-General's returns for the last few years attention is naturally directed to the very high mortality resulting from whooping-cough, during last year in London alone 2475 deaths being reported. The question arises—Can anything be done in the way of compulsory isolation to retard the diffusion of this disease, it being by no means an uncommon thing to find children suffering with the malady in a well-marked form at railway stations and in public conveyances of various kinds?

I am, Sirs, yours truly,

EDWARD SAMUEL LEE, M.D.

St. Leonards, Aug. 5th, 1893.

## "CANCER OF THE UTERUS."

*To the Editors of* THE LANCET.

SIRS,—I am pleased to find by Dr. Lewers's letter that he adopts the same means for performing supra-vaginal amputation of the cervix as I do—viz., the scissors. His method, however, differs from mine inasmuch as he cuts the cervix from the body of the uterus on a level with the internal os, whereas I prefer to cut out a cone-shaped piece from the body so as to remove as much of the endometrium as possible. I quite agree with Dr. Lewers that the figures quoted by Dr. Byrne in reference to vaginal hysterectomy are somewhat misleading at the present time, and it is unfair to the operation to mix the results of operators who have done only one or two hysterectomies with the results of operators who have done a considerable number. Thus in my early cases my mortality was large, whereas in my last eleven cases I have only had one death or a trifle over 9 per cent. and I have very little doubt that by carefully selecting cases the mortality may be reduced still lower. In all cases, however, in which the disease is limited to the vaginal portion of the cervix, I should advise the lesser operation as the risks of after complications are undoubtedly less and the shock to the patient from the operation is comparatively small.

I am, Sirs, yours truly,

Buckingham Palace Mansions, S.W. F. B. JESSETT.

## "MEDICAL AID ASSOCIATIONS."

*To the Editors of* THE LANCET.

SIRS,—The following may serve to illustrate the effects on the managers of these associations of the late action of the General Medical Council. I accepted last year, with some ignorance of the matter, the post of surgeon to the ——— Friendly Societies' Medical Association, numbering, I was informed, 1500 members. In return for the munificent sum of £150 per annum (increased by £25 this year) I was to attend twice a day at a surgery a mile away, treat and dispense for out-patients and visit members at their own homes within a radius of three miles. I was allowed £15 for cab hire (3*s.* per hour). The number of members turned out to be 2100. From January to June I paid 2000 visits over a straggling hilly town and the country around, attended twenty-four confinements, saw 6000 patients at the surgery and dispensed for them, wrote an unconscionable number of certificates, examined candidates for admission to clubs &c., without any aid whatever. A winter day's routine would include forty visits, ten miles of walking, the examining, treating, and dispensing for, eighty to a hundred patients at the surgery—thirteen hours' incessant work, which would leave me quite exhausted by nightfall, but happy if no confinement fetched me out of bed. I tried to do my work honestly, but found it impossible. On receipt of the resolution from the General Medical Council I communicated with my committee, drawing their attention to it, and asked them to provide a dispenser and conveyance, offering to bear half of the cost myself. My proposals were received with an insulting negative. I resigned; my resignation was accepted in the most ungracious manner, and advertisements were at once issued for a "new doctor." I may add, that the members of the association were for the most part willing and ready to pay an increased subscription (of 6*d.* a year!) to cover the cost of my relief but were overridden by three of the committee. I enclose my card and am, Sirs, yours faithfully, THE SURGEON.

## RETURN PILGRIMS FROM MECCA.

EGYPTIAN QUARANTINE AT TORR.

(FROM A CORRESPONDENT.)

ACCORDING to the official report from Torr of July 25th the total number of pilgrims in the quarantine camp at that date was 12,106, whilst five steamships with a complement of 4186 pilgrims were waiting in the roadstead, the station being so full that it was impossible to disembark them, and five more steamships were expected on the next day. The total number of cases of cholera in the encampment from the first arrivals of the return pilgrims in the first week in July to the above date was 128 and there were 91 deaths. The greatest number of cases has been in the first ships arriving from Jedda, whilst the pilgrims who have taken the route to Medina and Yambo and have embarked at the latter place for Torr have arrived in a very satisfactory sanitary condition. The same fact has been noted in previous epidemics of cholera amongst the return pilgrims.

Amongst the first steamships to arrive this season from Jedda were the Turkish vessels *Abdul Kader* and *Seguthly*, carrying Turkish pilgrims. The pilgrims by these two ships suffered from the epidemic very severely. The first of these reported two deaths from cholera during the voyage. Arriving on July 8th at the station with 335 pilgrims, who were immediately disembarked, 44 cases occurred amongst them between that date and July 19th. In the section of the pilgrims who arrived by the *Seguthly* 56 cases occurred between July 5th and July 18th. Amongst the last six vessels,

with a complement of 5108 pilgrims, which arrived at the quarantine station since July 22nd, five of them from Yambo and one from Jedda, only 1 suspected death occurred during the voyage and 2 deaths from ordinary diseases. Allowing the five steamships expected to arrive daily an average complement of 4255, there will be already at the quarantine station, in the encampment and roadstead 20,547 pilgrims; whilst the total number of ordinary return pilgrims is about half that number. In 1881 the total number was 10,000. Only about 629 pilgrims have as yet finished their quarantine period at Torr and these, being Egyptians, have been sent to Rass Mallap to undergo a further three days' observation before being allowed to land in Egypt. On July 21st there were seven cases in the station cholera hospital and 239 in the hospital for ordinary diseases, so that the cases clinically recognised as cholera are fast diminishing. Amongst ordinary diseases diarrhœa plays an important part. Of the total 239 patients 115 are cases of diarrhœa, 54 of these being from the sections of the pilgrims who arrived by the *Abdul Kader* and *Seguthly*, the two sections so severely visited by typical cholera.

It is satisfactory to learn from a report of the director of the station of July 21st that the water-supply is still abundant and good, though at first the water of some of the wells examined at the Khedivial laboratory in Cairo was pronounced to be "doubtful." This, however, may have been the water which had been stagnant for some time in the wells. The medical and nursing staff of Torr has been increased. Several medical men and ten nurses (*infirmiers*) were despatched as soon as it was known that the others were overworked. The health of the staff and villagers outside the station is satisfactory. The epidemic seems to confine itself to the pilgrims. In the epidemic of 1881 the medical man in charge of the quarantine station, then at El Widz, reported: "The guards, the sanitary staff, the soldiers forming the cordon, the traders in food &c., established in the various divisions of the camp, the nurses, washers of the dead have not been affected—in a word, the cholera epidemic has prevailed only amongst the pilgrims; other people remained free, notwithstanding the close communication of many of them with the pilgrims. Typical Asiatic cholera lasted about twenty days and amounted to about sixty cases. After this it was replaced by 'suspected diarrhœa,' which caused from 200 to 300 deaths. The total number of pilgrims was about 10,000, the number of sanitary staff, soldiers, inhabitants &c. from 4000 to 5000."—(Epidemic of 1881).

The resources of the Egyptian Government and the Quarantine Board will be taxed to the utmost to deal with the immense number of pilgrims arriving simultaneously this season. It was foreseen by the quarantine administration that extraordinary preparations would have to be made on account of the exceptionally large pilgrimage should cholera break out. Preparations were accordingly made to accommodate over 10,000 at one time at "Torr," being about the utmost that can be properly accommodated. It was hoped that some sections would have finished their quarantine and have been sent on to their destination before others arrived, but the constant recurrence of cases of cholera and the quickness with which large numbers arrive—some vessels bringing as many as 1000 and 1200 passengers—have upset all calculations and the great difficulty of how they are to be dealt with is now presenting itself. The captains of vessels in the roadstead are protesting against being kept there with the pilgrims on board, whilst the pilgrims themselves are almost in a state of revolt and are clamouring to be allowed to land even without tents so as to commence their quarantine, as the days count from the time of disembarkation. Should they be allowed to land without tent accommodation it will be a difficult matter to provide a sufficient water-supply for such an enormous number. Although it is still abundant for 10,000 or 12,000 it does not follow that it would suffice for 20,000 at one time.

A proposition has been made to keep the fresh arrivals on board their steamers in the roadstead till sections already in camp can be sent on to their destination to make room for them in order to prevent overcrowding and that military should be sent to maintain order. This proposition was opposed by a few of the members of the Board and the British Delegate abstained from taking part in it. The President and administration of the Board are doing their best to meet the difficulty. The Egyptian pilgrims still continue in a very satisfactory sanitary condition. The Turks have suffered most severely.

Egypt, July 26th, 1893.

## LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

*Manslaughter on the High Seas.*

THE Crown Court in this city has been the scene of many trials for murder, manslaughter and wounding on the high seas. In 1857 Captain Rogers and his two mates were tried for the wilful murder of a seaman named Rose and were all sentenced to death. Captain Rogers suffered the death penalty, the mates being respited. The evidence disclosed the most shocking cruelty and public feeling was strongly excited against the prisoners; but a reactionary feeling set in soon after the captain had paid the penalty of his crime. In 1858 another captain was tried for murder, was found guilty of manslaughter, and was sentenced to penal servitude for life, the judge (the late Baron Martin) hinting very plainly that he considered it to be a case of murder. More recently Justice Day severely punished a captain and his mate for the manslaughter of a seaman, characterising the case as being a disgrace to the British flag and last week the captain and mate of the British ship *Watchman* were tried before Justice Lawrance and were found guilty of the manslaughter of George W. Orr. The evidence showed that there had been great cruelty inflicted on the deceased and other members of the crew, and though the jury recommended the prisoners to mercy the judge sentenced each to nine months' imprisonment with hard labour. Notwithstanding all that has been done for merchant seamen in recent years much still remains to be done. At the present time the crew of many a vessel includes at least one man who is totally unfit to proceed to sea on account of some chest or other disease, combined with ignorance of seaman's duties and dirty habits—an object of contempt to the officers and of loathing to his fellow seamen. On the other hand, captains and mates have much to try their temper. Too often they have to proceed to sea with many of the crew in a state of intoxication and some are always more or less insubordinate. It is probably a consideration of these facts, which are well known to those from whom the jurors are drawn, that their verdicts are accompanied with recommendations to mercy.

## NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

*Hospital News.*

THE Newcastle Home for Incurables was opened on Thursday last by the mayoress. I have in previous notes described the building and how the funds are provided. There is a seaside home, which was originally situated at Cotham, near Redcar, with one patient, but about nine years ago it was removed to Whitby. Last year nearly 200 cases were dealt with. A garden party was held last week in the grounds of Skelton Castle for the benefit of the home, which will no doubt strengthen its financial position. The ninety-fourth annual report of the Sunderland Infirmary has been issued, in which it is stated that the year has been one of great activity, a larger number of persons having been treated than in any previous year. The total income reached nearly £9700 of which £4759 was subscribed by the working classes. The Monkwearmouth Hospital at the northern side of the Wear has also done

well financially, as it is stated that during the last twelve months the contributions of the working-class population have increased 250 per cent. At the Royal Infirmary, Newcastle, two special departments have been established—the throat and ear and the skin. Mr. G. W. Ridley has been appointed to the former and Dr. Limont to the latter department.

*Presentation.*

Dr. Martin has been presented at Sunderland with a handsome reading lamp in appreciation of his instruction to an ambulance class there. Dr. D. McBean has also been the recipient of a testimonial from the ambulance class which he has instructed at Wallsend.

*Folk-lore of the North of England.*

Dr. James Hardy, the secretary of the Berwickshire Naturalists' Field Club, has almost ready for publication the second volume of the "Denham Tracts," which he has edited for the Folk-lore Society. The work is a reprint of a collection of tracts by the late Michael A. Denham and relates principally to the North of England and the Border. Mr. Denham was an antiquarian of repute and was in business as a chemist at Piercebridge-on-the-Tees, near Darlington, where he led a quiet but observant life. He was a perfect repository of popular superstitions connected with medicine in the North of England. I have known him to travel for days to verify a single fact connected with his beloved study.

*Healthy Homes.*

A society has been formed in Sunderland for the purpose of stimulating public opinion on the pressing social questions of general sanitation and healthy dwellings in particular.

It is stated that the governors of the Sunderland Infirmary have received official intimation of a bequest of £1000 to the general funds of the infirmary by the late Miss Backhouse.

Newcastle-on-Tyne, Aug. 9th.

## SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

*Edinburgh University Graduation Ceremony.*

LAST week the August graduation ceremony at the Edinburgh University took place. Amongst those presented for the honorary degree of LL.D. were Sir Stuart Knill, Bart., Lord Mayor of London, and Dr. Henry D. Littlejohn, the President of the British Institute of Public Health. The degree of M.D. was conferred upon sixty gentlemen, who were presented by Professor Grainger Stewart. The gentlemen who obtained gold medals for their theses were Dr. J. L. Smith, whose thesis was entitled "Myroidectomy and Respiratory Exchange; a contribution to the Pathology of Myxœdema"; Dr. J. C. Taylor, who wrote on "The Health Resorts of the Canary Islands"; Dr. W. E. F. Thomson on "The True Position of Oxygen as a Restorative in Carbonic Acid Poisoning"; and Dr. J. S. R. Russell on "An Experimental Investigation of the Nerve Roots which enter into the Formation of the Limb Plexuses of the Dog and Monkey." Four gentlemen were presented for the degree of D.Sc. in Public Health. Professor Grainger Stewart also presented 214 gentlemen for the degree of M.B., C.M. The address to the graduates was delivered by Professor Grainger Stewart. He first congratulated those who received the honorary degree of LL.D. and referred to the fact that that was the first graduation ceremony at which a Lord Mayor of London had been present. He also referred to the Lord Provost of Edinburgh, who was present, as a distinguished graduate in medicine of the University. He took the opportunity of informing the visitors that the University had originated as the Town's College and was founded and fostered by the Town Council and was a perpetual monument of what a municipality might achieve. It had not taken origin by Papal Bull like some of the more ancient universities and no wealthy patrons lavished great endowments on it in its infancy. He addressed himself in the main to those who had for the first time graduated in medicine. He congratulated them in the name of his colleagues. They were graduates of no mean university, but of an institution of great and old renown. Their names were the most recent on a list which had a great historic past. They were "laureated" that day by the university which had been made famous by the Munroes, by Whyte, by Cullen, by the Gregorys, by Syme, Simpson, Allison, Goodsir, Christison and Bennet; and which had included amongst its graduates such illustrious names as Bright, Addison and Hodgkin. After reviewing the toilsome path the graduates had trodden to reach their present point, he wished he could help them with some hints as to the paths they should follow. What they had to see to was that they were making the best of the powers they had—that their powers must be looked at in two aspects, that of professional attainment and that of qualities of mind and character. They must continue to be readers watching the development of new ideas. Above all they must study cases; they must strive to master them and make it their endeavour not to pass one by without an intelligent appreciation of its features. Apart from attainments there was a quality of mind and character which had a great influence on professional success. When Dr. Stokes of Dublin had to discuss a professional brother he used to ask, "Has he the *mens medica?*" That included mental and moral characteristics, and first amongst them it implied power of observation. There were some people who observed nothing, whose minds were so vacant and so occupied with their own workings that no external object seemed to catch their attention; others observed distortedly, and some habitually made observations of entirely imaginary facts. He who had the *mens medica* observed quickly and accurately and every sense became so acute that very little escaped his observation. The true physician concentrated his attention on whatever he had on hand at the moment; he had a good memory and his brain retained records of what he had seen and heard. The *mens medica* also implied soundness; a just and due appreciation of the relative value of facts, an analytic and synthetic power of discrimination and classification, a capacity of forming an opinion for oneself, well-balanced and decisive, and power which carried weight with others. The true physician was also a man of resource. He had a perception of the end to be arrived at and of the means fitted to accomplish that end. He also had certain moral qualities, amongst which he would place a kindly sympathetic nature. He was a man of resolute will. He had a reverent habit of mind—a reverence for the experience and opinion of others, a reverence for man and for God. He thus had weight of character and commanded the confidence of his patients. If they were to make the best of their lives they must not neglect physical exercise. Every professional man ought also to have some special field of study apart from his professional work. He concluded by enjoining upon them their duty to God and reverence to their Creator.

*The Liston Victoria Jubilee Prize.*

The Royal College of Surgeons of Edinburgh has awarded this prize, which is of the value of £100, to Mr. C. W. Cathcart, F.R.C.S., and Mr. Harold J. Stiles, F.R.C.S. Edin. The prize is one of those so liberally bestowed by his Excellency Dr. Gunning, and is awarded triennially.

*Vacation Arrangements at the Royal Infirmary, Edinburgh.*

Nearly all the staff in charge of wards, both on the surgical and medical side of the infirmary, have gone out of town for their summer holidays, so that the patients are in charge of the assistant physicians and the assistant surgeons. Many have gone to the Highlands, but some have gone to Norway. To the assistant surgeons holiday time is always welcome, for it gives them opportunities of performing operations which are not numerous when the senior members of the staff are on the spot.

August 8th, 1893.

## IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

*Insanitary Condition of Baldoyle.*

AT a recent meeting of the guardians of the North Dublin union a resolution was adopted again calling the attention of the corporation to the report of the medical officer of the district as to the insanitary condition of Baldoyle in consequence of defective sewerage and want of scavenging, and stating that the guardians would have to put the law in motion if prompt action was not taken.

*Jervis-street Hospital.*

This institution has contracted a large debt—some £10,000, the balance of the cost of erection—and in order to clear off a considerable portion of this debt the governors have engaged the Royal Dublin Society's premises at Ball's Bridge for a series of *fêtes* for the week commencing May 14th next. Jervis-street Hospital contains a large number of beds and numerous accident cases are yearly admitted to its wards.

*Proposed Abattoir for Cork.*

The slaughter-houses in Cork, forty in number, are an eyesore to sanitarians, and should cholera unfortunately come amongst us the result may be disastrous. The public health committee have had before them the project of erecting an abattoir and abolishing the slaughter-houses.

*Health of Dublin, June Quarter.*

For the quarter ending July 1st the births registered in the Dublin registration district amounted to 2678, or 30·6; with 2283 deaths, or 26·1, being 1·0 below the average for the same quarter. Zymotic diseases caused 308 deaths, or 53 over the number for March quarter, equal to an annual rate of 3·5, or 0·3 over the average rate for the corresponding quarter of the last ten years. Measles caused 38 deaths, scarlet fever 9, whooping-cough 56 and influenza 24. The deaths from enteric fever numbered 40 and from typhus fever 4. Diseases of the respiratory system (not including phthisis which caused 355) were fatal in 385 instances, being 14 per cent. below the average. The deaths of children under one year of age amounted to 364 and under five years to 629, a number equal to an annual mortality of 68·0 in every 1000 children at that age.

*Appointment of Coroner.*

The vacancy in the office of coroner for the city of Belfast has been filled by the appointment of a solicitor, Mr. E. S. Finnegan. The selection is in the hands of the corporation of Belfast.

Aug. 8th.

## BERLIN.

(FROM OUR OWN CORRESPONDENT.)

*"Catching Cold" and Bacteria.*

PROFESSOR SCHENK[1] has written a paper on Some of the Effects of Warmth on Micro-organisms. By means of a specially constructed apparatus he found that micro-organisms move towards a warm point. He calls this thermotaxis and advances an interesting theory as to its relation to "catching cold." His chief conclusions are: (1) Warmth acts as a stimulant on micro-organisms; (2) micro-organisms in the neighbourhood of a warm body move in a direction towards that body (thermotaxis); (3) thermotaxis is a vital property of bacteria and may be noticed with temperature difference of 8° C. to 10° C.; (4) free bacteria show this movement more distinctly than those united in chains; (5) micro-organisms do not immediately accommodate themselves to a change to higher temperature and do not at first show full energy; (6) the diminution of energy and virulence disappears with a gradual acclimatisation to the higher temperature (incubation); (7) cases of "catching cold" may be divided into two groups—one with which bacteria have nothing to do, the other which is the expression of an infection; (8) cases of non-infectious "catching cold" come on very soon after the action of the agent—infectious cases, on the other hand, do not develop at once; (9) when a person enters a cold room the bacteria in the air move to his warm body and, finding admission through the skin or otherwise, produce, after a certain time of incubation, the results ordinarily attributed to "catching cold"; the hair bulb-sheaths, the sweat glands and the mucous membranes all offer possible points of entry to the bacteria.

*Novel Treatment of Typhoid Fever.*

Dr. Hammerschlag[2] records five cases in which the blood of patients who had recovered from typhoid fever was transfused to patients suffering from the same disease. Coagulation was hindered by adding 4 per cent. of oxalate of soda. Dr. Hammerschlag started on the principle that the blood of convalescents from typhoid fever contains a substance which antagonises the typhoid poison. The results were not very definite. In one case a remarkable fall of temperature occurred in the night following the injection, but the following evening the fever returned. One case ended fatally. In three cases the blood was taken from patients only recently free from fever; in the other two cases the donors of the blood had been for from five to seven weeks free from fever.

[1] Centralblatt für Bactericlogie.
[2] Deutsche Medicinische Wochenschrift, No. 30.

## Obituary.

D. S. DOWNES, L.R.C.P. AND L.R.C.S. IREL.

MR. D. S. DOWNES, of Moreton Villa, Kentish Town, whose death occurred on Aug. 2nd, will be greatly missed by the police of the Y Division, in which he was divisional surgeon for twenty-seven years, by the poor of a large and populous district and by a wide circle of patients and friends, the two terms being with him, to a special degree, often synonymous. His funeral on Saturday last was an impressive testimony to the popular esteem and affectionate regard in which he was held. The coffin was covered with wreaths; the band and a detachment of the divisional police accompanied the procession to the boundary of the division and the thoroughfares for the best part of a mile were lined on either side by people whose bent heads and raised hats, as the coffin was borne past, added significance to the solemn dirge of the Dead March in "Saul," played by the police band. The deceased, who was born in Limerick, was a nephew of the Very Rev. Dr. Downes, Vicar-General of the diocese, and he came to London when quite a young man. He was L.R.C.P.I. 1863, L.R.C.S.I. 1862, L.M. 1863, Catholic University, Dublin; Fellow of the Obstetrical Society of London; Member of the Irish Medical Schools' and Graduates' Association; surgeon to the Camden Town Dispensary; divisional surgeon of police, Kentish Town; and honorary surgeon to the Governesses' Asylum.

NEW HOSPITAL AT BLACKPOOL.—On the 28th ult. the foundation-stone of a new hospital was laid in Whitegate-lane, Blackpool. Subscriptions to the amount of about £3650 have already been promised. The Mayor officiated on the occasion, and had, it was announced, presented building materials to the value of £100.

MEDICAL REPRESENTATION ON THE BRUSSELS HOSPITAL COUNCIL.—The Brussels *Conseil des Hospices*, or governing body of all the hospitals, has hitherto been composed entirely of laymen, all attempts to get a medical member appointed being met by the objection that such a member would almost necessarily become a kind of autocrat over the physicians and surgeons under the Council. For many years past, however, Dr. Kops, in his capacity as member of the Communal Council, has been endeavouring to convince his colleagues of the importance of the medical profession being represented on the Hospital Council. He has also very strongly advocated the selection of medical officers by the French system of public *concours*, or competitive discourses, in order to obviate the filling of these important posts by family or by private and personal influences. Indeed, the two reforms were very closely related to each other. Year after year Dr. Kops was beaten, but stood manfully to his guns. Some three years ago, however, an agitation was commenced amongst the working classes for representation on the Hospital Council, and, instead of this prejudicing Dr. Kops' favourite cause, as it might have been expected to do, the communal council was induced to pass a vote by a large majority, "that the next vacancy should be filled either by a medical man or by a representative of labour," the result of which was that a well-known medical man, Dr. Vleminckx, has been recently appointed a member of the Hospital Council.

# Medical News.

UNIVERSITY OF EDINBURGH.—List of candidates to receive the degree of Doctor of Medicine and the degrees of Bachelor of Medicine and Master in Surgery, on Tuesday, Aug. 1st, 1893 :—

*Doctor of Medicine.*—‡Robert Abernethy, Scotland, M.B., C.M.; ‡Tom Stevenson Balfour, Scotland, M.B., C.M.; †John Barrie, Scotland, M.B., C.M.; ‡Walter Leonard Bell, Scotland, M.B., C.M.; William Andrew Betts, England, M.B., C.M. (with second-class honours); †James Linton Bogle, England, M.B., C.M.; *Francis Darby Boyd, Scotland, M.B., C.M.; ‡John Egerton Brandt, Madeira, B.A., M.B., C.M.; ‡Reginald Broadbent, England, M.B., C.M.; Daniel Walter Brown, England, M.B., C.M.; ‡Ernest Christison Carter, England, M.B., C.M. (with first-class honours); ‡Joshua Chaytor-Whyte, Ireland, M.B., C.M.; George Ernest Clemons, Tasmania, M.B., C.M.; ‡Alfred Charles Coles, England, M.B., C.M.; Frederick John William Cox, Scotland, M.B.; ‡Herbert Dobie, England, M.B., C.M.; Alexander Peters Drummond, Scotland, M.B., C.M.; William Everett, England, M.B., C.M. (with second-class honours); †William Fordyce, Scotland, M.B., C.M. (with first-class honours); †Frederick Gourlay, Scotland, M.B., C.M.; William Harding, England, M.B., C.M.; ‡Reginald Ernest Horsley, Australia, M.B., C.M.; George Hoyle, England, M.B., C.M.; ‡Henry Greville Huie, Scotland, M.B., C.M.; Henry Halcro Johnston, Scotland, M.B., C.M.; Thomas Looney Kennish, England, M.B., C.M.; Leslie James Lamrock, Australia, M.B., C.M.; ‡William Tasker Lundie, M.A., B.Sc. Scotland, M.B., C.M.; ‡Stuart Gerald M'Allum, India, M.B., C.M.; William Crawford M'Ewan, M.A. Scotland, M.B., C.M.; ‡John Wilson Martin, England, M.B., C.M.; Alexander Sutherland Miller, Scotland, M.B., C.M.; ‡Robert Alexander Murray, Scotland, M.B., C.M.; ‡Francis Cobham Nicholson, Australia, M.B., C.M.; ‡William Basil Orr, Scotland, M.B., C.M.; Maurice Paterson, Scotland, M.B., C.M.; †William Ernest Porter, England, M.B., C.M.; ‡Geoffrey Hammett Prance, England, M.B., C.M.; William Richards, England, M.B., C.M.; ‡Richard Richmond, M.B., C.M.; Stanley Riseley, England, M.B., C.M.; Hugh Leslie Roberts, England, M.B., C.M.; William Iverach Robertson, Scotland, M.B., C.M.; Edmund Robinson, England, M.B., C.M.; Richard Sanders Rogers, B.A., Australia, M.B., C.M.; ‡Frederick William Forbes Ross, Jamaica, M.B., C.M.; †Andrew Rowand, M.A., B.Sc. Scotland, M.B., C.M. (with second-class honours); *James Samuel Risien Russell, Demerara, M.B., C.M.; Gerard Septimus Samuelson, Australia, M.B., C.M.; James Foster Scott, B.A., America, M.B., C.M.; Arthur Sellars, England, M.B., C.M. (with second-class honours); Ernest W. Skinner, England, M.B., C.M.; *James Lorrain Smith, M.A., Scotland, M.B., C.M.; †George Alexander Sutherland, M.A., Scotland, M.B., C.M.; John Frederick Joseph Sykes, England, M.B., C.M.; Ernest Edmund Taylor, England, M.B., C.M.; *John Cleasby Taylor, England, M.B., C.M.; *William Ernest Francis Thomson, M.A., Scotland; Charles Edward Walker, England, M.B.; ‡Richard John Erskine Young, Scotland, M.B., C.M.

* Those who have obtained Gold Medals for their Dissertations.
† Deemed worthy of competing for the Dissertation Gold Medals.
‡ Commended for their Dissertations.

*Bachelor of Medicine and Master in Surgery.*—William Alfred Johnstone Alexander, M.A., Scotland; George Bell Anderson, Scotland; William Anderson, Ireland; William Christopher Anderson, M.A., Scotland; George John Awburn, England; Robert Ballantine, Scotland; John Thomas Balmford, England; Henry Percy Barlow, England; William Dodgson Barrow, England; Frederick William Barton, England; Daniel Henry Beegling, B.A., Australia; Jas. Bett Bell, Scotland; William Bruce Bell, Scotland; Hugh Percy Bennett, England; John Gibbs Francis Bent, England; William Thomas Blackledge, England; James Blyth, Scotland; Maxwell Ranken Bow, Scotland; Allan Stuart Boyd, Scotland; Christian William Branch, England; Alexander Hill Buchan, M.A., Scotland; John Martin Buist, Scotland; John Colin Caldwell, Scotland; Alexander William Cumming Cameron, Scotland; Peter Campbell, Scotland; Featherston Cargill, Scotland; Arthur Benjamin Carvosso, B.A., Australia; Henry William Case, England; James Gibson Cattanach, Scotland; William Catto, M.A., Scotland; William Rudolph Center, Scotland; John Eugene Adolphus Chatelier, India; Devendra Nath Chatterjee, B.A., India; Cuthbert Christy, England; John Clark, Scotland; Thomas Aldous Clinch, England; George Alexander Cohen, England; George Probyn Coldstream, Scotland; Raphael Avedis Garabed Constantian, Turkey; Henry Oakley Corfield, England; John Napier Craig, Scotland; George Panton Crarer, Scotland; §Charles Crerar, Scotland; Donald Bayne Crerar, Scotland; Andrew Croll, Scotland; David Reid Crow, Scotland; Nagendra Chandra Das, India; Arthur Dennison, England; George Robert Denton, England; Clarence Brian Dobell, England; James Kennedy Drysdale, Scotland; §John Buchanan Duff, Scotland; Robert Craig Dun, Scotland; John Davidson Duncan, Scotland; Robert William Duncan, England; Thomas Dunlop, Penang; James Churchill Dunn, New Zealand; George Henry Dupont, England; § Alexander Maitland Easterbrook, England; Edward Charles Edwards, England; Samuel Evans, India; Thomas Farthing, England; Duncan Monteith Ferguson, Scotland; Joseph Lawrence Ferris, Ireland; Peter Daniel Fick, Cape Colony; David Finlay, Scotland; Andrew Milroy Fleming, Scotland; William Edward Foggie, M.A., Scotland; Alfred Wightman Forrest, England; Arthur Foster, England; §William Edward Fothergill, M.A., B.Sc., England; John Ainslie Foulis, England; David Pierce Foulkes, England; Robert Algernon Fox, England; Andrew Mearns Fraser, England; John Gallie Fraser, Scotland; Robert William Fraser, Wales; Archibald Gardner, Scotland; Thomas Gibson, Australia; Howard Beauchamp Gladstone, England; Charles Slevwright Glegg, Scotland; John Hastings Glover, Ireland; Thomas Goldie Goldie-Scot, Scotland; Frank Thornborough Gourlay, Scotland; Simon Dickson Graham, Scotland; James Taylor Grant, Scotland; Harry Grey, Scotland; Arthur Gwyther, India; William Thompson Hall, England; William Crosbie Hamilton, New Zealand; Robert Hanton, Scotland; Cooper Hardcastle, New South Wales; Thomas Brown Hearder, Wales; Charles Afred Hogg, Tasmania; Robert Hoggan, India; Crampton Whitaker Holme, England; John Hume, Scotland; Geoffry Percy Humphery, England; § Robert Hutchison, Scotland; John William Hyslop, Scotland; Ernest William John Ireland, Tasmania; William Roy Jackson, M.A., Scotland; Richard Cartwright Jameson, Scotland; William Ernest Jameson, England; Thomas John Jehu, Wales; Richard Kenyon, Scotland; Charles Kerr, Scotland; Clement Thomas Cory Kingdon, England; John Kippax, England; Walter Charles Campbell Kirkwood, Scotland; Louis Francis Behagen Knuthsen, West Indies; Frederick William Langton, B.A., New South Wales; John Albert Lee, England; Edward Stewart Lewer, England; Frederick Lishman, England; George Osborne Morgan Lunt, Wales; William Frederick M'Alister-Hewlings, England; George Allardice Macdonald, West Indies; Hugh M'Donald, Scotland; Arthur William James MacFadden, Ireland; George MacGibbon, Scotland; John Alexander Mackenzie, Scotland; Arthur Mackintosh, Scotland; Hugh John Mackintosh, Scotland; John Drummond Pryde M'Latchie, Scotland; James Dugald Maclean, Scotland; John Duncan M'Millan, Scotland; James Garvie M'Naughton, Scotland; Andrew M'Neil, B.A., Australia; Archibald Macnicol, Scotland; Patrick William MacVean, Scotland; § Robert Haldane Makgill, Scotland; Robert Bruce Marjoribanks, India; James Marsh, England; Robert Brownlie Martin, Scotland; Anwyl Charles Matchett, England; Roderick Murdoch Matheson, Scotland; James Crawford Maxwell, M.A., Scotland; William Miller, Scotland; Thomas Benjamin Moore, B.A., America; Arthur Henry Moorhead, Ireland; John Mudie Morris, M.A., Scotland; Sylvanis Glanville Morris, Wales; Charles Graham Murray, Barbadoes; David Murray, Scotland; Duncan Gray Nowton, Scotland; James Dickson Noble, Scotland; Louis Septimus Francis de Rohan Norman, Ireland; George Williamson Park, Scotland; Consett Howard Passman, England; §James Veitch Patterson, M.A., Scotland; Frank Russell Patterson, Turkey; James Pearse, England; John Penny, England; Andrew Philip, Scotland; George Phillips, England; James Coubro Potter, England; Raymond Herbert Price, India; George Loraine Kerr Pringle, Scotland; Samuel Willis Prowse, B.A., Canada; Elias Bell Purdon, Ireland; George Martin Rae, England; Matthew Burrow Ray, England; James Reiach, Scotland; Robert Rendall, Scotland; Robert Riddell, Scotland; Alan Robertson, Singapore; William Robertson, England; Edward Robinson, England; James Benjamin Robinson, West Indies; Leonard Nicholas Robinson, England; Francis White Hope Robson, England; Joseph Ernest Rogers, New Zealand; Robert Rosie, Scotland; William Archibald Rutherford, England; Selim Moses John Saliba, Syria; Cecil Edward Salt, England; Muir Sandeman, M.A., Scotland; Herman Schmitz, England; Henry Scott, Scotland; William Elmsley Scott-Moncrieff, Scotland; John Payzant Silver, B.A., Canada; Arthur Henry Havens Sinclair, Scotland; Archibald Adam Scot Skirving, Scotland; George Smith, M.A., Scotland; Thomas Smith, Scotland; John Sorley, M.A., Scotland; St. John Stanwell, England; Arthur Paget Stevenson, England; John Steed, England; James Wilson Stenhouse, Scotland; Charles Parker Stewart, Scotland; § David Waters Sutherland, Australia; James Murray Sutter, Scotland; John Tennant, M.A., Scotland; George St. Clair Thom, Scotland; David Thomas, M.A., Scotland; Ernest Stanley Templeton Towert, South Africa; Walter Barrie Turnbull, Scotland; Herbert Wynne Vaughan-Williams, Wales; § Hugh Walker, M.A., Scotland; James Gellatly Walker, India; Harry Stones Walsh, England; Ernest Edwin Waters, England; Francis Hammond Watling, India; Robert Henry Watson, M.A., Scotland; Thomas Watson, Scotland; William Thomas Wearing, England; § David Arthur Welsh, M.A., B.Sc., Scotland; Thomas Roberts Williams, Wales; Richard Arderne Wilson, South Africa; Thomas Yeates, Ireland; John Brown Yeoman, Scotland; Zorab Mackertich Zorab, India.

§ Indicates that the candidate has passed the examinations with first-class honours.

*Master in Surgery.*—Charles Edward Walker (M.B. 1878), England.

The following scholarships and prizes have been awarded:—Ettles Scholarship, Robert Hutchison, M.B., C.M.; Beaney Prize in Anatomy and Surgery, Hugh Walker, M.A., M.B., C.M.; Syme Surgical Fellowship, William Menzies Hutton, M.B., C.M.; Murchison Scholarship in Clinical Medicine, David Arthur Welsh, M.A., B.Sc., M.B., C.M.; Gunning Victoria Jubilee Gregory Prize in Practice of Physic, Robert Main Horne, M.B., C.M.; Gunning Victoria Jubilee Joseph Black Prize in Chemistry, Theodore Rettie, B.Sc.; Buchanan Scholarship in Gynæcology, William Edward Fothergill, M.A., B.Sc., M.B., C.M.; James Scott Scholarship in Midwifery, Alexander Maitland Easterbrook, M.B., C.M.; Milner Fothergill Gold Medal in Therapeutics, William George Aitchison Robertson, M.D., D.Sc.; Wightman Prize in Clinical Medicine, James Pearse, M.B., C.M.; Dobbie-Smith Prize in Botany, Thomas Duncanson Sadler.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The following is an official list of the candidates who passed the respective examinations of the above Conjoint Board at the July sittings in Glasgow:—

*First Examination (five years' course).—Passed with distinction:* Hugh Macpherson, Oban; Arthur Fletcher Jones, Chester. *Ordinary Pass list:* Hedda Alstrom, Sweden; James R. Riddell, Glasgow; Selina F. Fox, London; Grace H. Stewart, Portishead; Kathleen H. Moore, Birmingham; Christina H. Stirling, Perth; Richard F. Flood, Reigate; Claudia A. P. Rowse, London; Andrew M'Credie, Stranraer; James M'Glynn, county Tyrone; William J. Aiken, county Tyrone. *In Division I. (Physics):* George H. A Taylor. *In Division III. (Elementary Biology):* Robert Mackie.

*First Examination (four years' course).*—Robert H. Fleming, Strathaven; Edward B. Marshall, Preston; Robert J. Stoddart, Douglas, Cork; Roland E. Moriarty, Cork; Peter A. Winckley, Calcut, India; J. A. E. A. Lavery, Birmingham; Hugh J. D. Mackay, Kirkwall; Beatrice Ann M'Gregor, Edinburgh; D. V. M'Craig, Middlesbrough-on-Tees; Joseph O'Meara, Bruff, Limerick; Robert J. Molison, London; Wm. Boyd Kilrea; Albert E. Blades, Sheffield; Ellis O. Jones, Carnarvonshire; Wm. G. Pritchard, Carnarvonshire; James T. Hancock, Birkenhead; Joseph F. Pougnet-Mauritius; George C. Henry, county Tyrone; Nelson Johnstone, county Cork; Daniel Villesid, Spain; Wm. T. M'Killiam, Huntly; James Brownridge, Paisley; Robert O. Harrison, Glasgow; Richard E. Roberts, Carnarvon. *In Division I. (Chemistry):* John E. O'Ryan, Samuel Robinson.

*Second Examination.—With Distinction:* James Battersby, Glasgow. *Pass list:* Edmund Denison, Leeds; Wm. R. Beck, Denbigh; George C. Murray, Dunkeld; Arthur George Kewley, Derbyshire; Samuel Robb, Dublin; Joseph A. Sanderson, Lancashire; Helen S. MacDonald, Inverness; John W. Cuthbertson, Rhondda Valley; Septimus Bashan, South Shields; Richard S. Martin, Farnworth; Maurice H. Enright, Listowel, Kerry; Samuel Nicholson, Partick; William Macdonald, Inverness; Francis J. Whitehead, Leicester; John J. Bell, county Tyrone; Joshua H. Hall, Bolton; James M. O'Sullivan, Milltown; Annie C. Sutherland, London; Forbes H. Wolfe, Glasgow; William Gordon, Salisbury; James Wishart, Leith; Wm. R. Ridley, Gateshead; Charles Peddie, Dufftown. *In Division I. (Anatomy):* D. A. Chalmers, D. Villesid, F. Jeeves, H. Macfarlane, C. Delacherois, A. B. C. Orchard, J. A. Meeke, G. P. Searle, W. H. Madden, Winifred J. Pierce, J. B. Voortman. *In Division II. (Physiology):* E. B. H. Hughes, F. Jeeves, H. W. G. Cottell, S. B. Siddall, J. M. Beattie. *In Division III. (Materia Medica):* R. P. Graham, S. B. Siddall, Samuel Rees.

*Final Examination.*—Gerda B. Jacobi, London; James Boyd, Glasgow; James N. Macmullan, county Antrim; Edwd. M'Garity, Bishop Auckland; Henry Case, Tuttington Hall; John M. Macmillan, Glasgow; John O'Connell, county Kerry; Catherine Howie, Glasgow; Kate K. Paton, Glasgow; Henry H. Oram, Southport; William C. Patterson, Hamilton; John C. Woods, Preston; Janet Russell Wells, Glasgow; Henry de C. O'Neale, Barbadoes; James Devon, Glasgow; William E. Blakely, county Tyrone; David Stephen, Glasgow; Elizabeth T. Gilchrist, Greenock; Herbert E. C. Corkery, Cork; Alfred G. Cooley, London; David Y. Clark, Lenzie; William R. Abernethy, Glasnevin; William C. Alexander, Prestwick; B. C. Ghosh, Edinburgh; Harry R. Wolfe, Glasgow; Robert Lee Brown, Edinburgh; John Towart, Glasgow; Ramsay Mailer, Edinburgh; Rees Thomas Jones, Glasgow; John Clark, Shawlands; Joseph C. Sturdy, Bradford. *In Division I. (Medicine &c.)*—L. Bowman. *In Division III. (Midwifery &c.)*—Susan Campbell, Thomas O. Jones, Fred. Smith, P. W. Griffiths, J. A. Swainson, B.A., James Munro, John Tait, Wm. J. Woods.

ISLE OF MAN HOSPITAL.—The report read at the recent annual meeting of this hospital was on the whole satisfactory. Much good work had been done during the past year, and the finances of the institution are by no means of a depressing character, since the debt which had for some time hampered the work of the hospital had been reduced.

LITERARY INTELLIGENCE.—A new medical monthly has been established in Moscow entitled *Bibliotcka Vracha*, or The Doctor's Library. The editor is Dr. D. P. Dubelir.

PRESENTATION.—Dr. Edward Ferrand Astley of Dover was on Monday, July 31st, presented with a handsome silver salver, together with a portrait and an address, in recognition of his varied and valuable services to Dover and its institutions.

MEDICAL MAGISTRATES.—Mr. R. C. Appleton has been placed on the Commission of the Peace for the Borough of Beverley.—Mr. John Barr, M.B. Glasg., has been placed on the Commission of the Peace for the County Palatine of Lancaster.

NEW ASYLUM FOR LINCOLNSHIRE.—The Kesteven County Council has decided to erect an asylum in a suitable part of Kesteven for the reception of its own lunatics, instead of re-uniting as one of the contracting parties to build an annex to the County Lunatic Asylum at Bracebridge.

CORBETT HOSPITAL, STOURBRIDGE.—This hospital, the gift to his native town of Mr. John Corbett, M.P., was opened on the 31st ult. The gift consists of a mansion, which will now be converted into a hospital, and an estate of thirty acres of land, together with a sum of £5000 for endowment and needed alterations of the building.

HUDDERSFIELD INFIRMARY.—The annual report of this institution shows that the income for the present year is £6112, being an increase of £268 over that of last year. The amount carried over is £205. During the year 818 persons have been received into the wards. The number of out-patients relieved was 4274. Altogether the report of the board of management shows the working of the hospital to be very satisfactory. The report of the Meltham Convalescent Home also shows a satisfactory condition of affairs.

LITERARY INTELLIGENCE.—We have received from Messrs. Blades, East and Blades, of Abchurch-lane, E.C., a prospectus of a work entitled "Modern History of the City of London," a pictorial and descriptive record of municipal and social progress during the last 150 years. The aim of the work is, according to the announcement, to give a history of the City and its liberties from the accession of George III. to the present time, illustrated by views of London as it now exists side by side with the London of Dr. Johnson's day. The prospectus is accompanied by specimens of the illustrations intended to adorn the book.

ST. ANDREWS GRADUATES' ASSOCIATION.—At the annual meeting, held at 11, Chandos-street, Cavendish-square, on Wednesday last, the following resolution was carried unanimously: "That the council and members of the St. Andrews Graduates' Association desire to offer to their learned president, Sir Benjamin Ward Richardson, their most hearty congratulations on the dignity Her Most Gracious Majesty the Queen has conferred upon him, and sincerely hope that renewed health and vigour may enable him for many years to come to shed lustre upon medical science and to be a benefactor to his country."

THE METROPOLITAN ASYLUMS BOARD.—At the fortnightly meeting of the members of this Board several matters of interest were brought forward. Many letters in connexion with the prevailing fever epidemic were read. Petitions against the acquisition of the Grangewood Estate, Norwood, as a site for a fever hospital had been lodged with the Board. It was agreed, on the recommendation of the finance committee, that the contribution orders should be assessed upon the metropolitan unions for the sum of £278,379 for "common charges," being at the rate of 2*d.* in the pound upon the rateable value, and for the sum of £70,300 for "maintenance of patients." Loans were to be sought for the purchase of land at Lewisham and of other land adjoining the North-Eastern Hospital. Replying to a question put by Sir Douglas Galton, Mr. Acworth said the facts as to cholera seemed to be that, although cholera was a notifiable disease under the Act, the kind of cholera—Asiatic or English—to be notified was not defined and more deaths had appeared in the Registrar-General's returns than there were cases notified. The returns of fever showed that their hospitals were still quite full.

NORTH-WESTERN FEVER HOSPITAL. — On the 27th ult. Mr. Stamford Felce, deputy-chairman of the local committee of this hospital, in the absence of Sir E. Goldsworthy, laid the foundation stone of a new administration block.

WALSALL COTTAGE HOSPITAL.—At the quarterly meeting of the general committee of this hospital it was announced that a gentleman, whose name did not transpire, had generously promised to donate the sum of £1000 towards the erection of a new medical ward on the condition that £2000 was raised for the same purpose within three months.

A PLAGUE OF WASPS.—Last week at Petersham Park, whilst a number of children enjoying an "outing" under the auspices of the Salvation Army were partaking of their afternoon meal, consisting of a variety of sweetstuffs usually associated with juvenile teas, thousands of wasps suddenly alighted upon the tables. Many of the children were badly stung. The insects were eventually dislodged by a clever artifice. Some of the men accompanying the party seized several of the jam-pots and, rushing to the neighbouring trees, quickly covered the branches with the preserved fruit. This had the desired effect, for soon the trees were completely covered with the wasps and further damage to the children was averted.

# Parliamentary Intelligence.

## NOTES ON CURRENT TOPICS.

*Colour Vision Tests in the Merchant Service.*

A REPORT has been issued by the Assistant Secretary of the Marine Department to the Secretary of the Board of Trade on the colour tests used in the examination of candidates for masters' and mates' certificates of competency and others in the British Mercantile Marine. The report is accompanied by statistical tables showing the number of persons who presented themselves for examination in respect of the appreciation of colour. By the report it appears that the number of persons who passed the examination in one form or another amounted to 4577, as compared with 4652 in the same class who were successful in 1892. In the present year thirty-five persons were rejected for their inability to distinguish colours, as against twenty-seven who were rejected in the previous year. The sense of colour was tested by means of tinted cards and glasses.

*The Chemical Workers &c. Committees.*

We understand that the departmental committee appointed to consider the conditions under which chemical workers carry on their employment will number amongst its members the following gentlemen: Professor P. A. Simpson (chairman), Dr. D. J. O'Neil, Mr. A. E. Fletcher (inspector under the Alkali Acts), and Mr. H. S. Richmond (inspector of factories). The similar committees appointed to inquire into the conditions of labour in other dangerous or unhealthy industries are constituted as follows: White Lead Manufacture: Dr. Dupré, F.R.S. (chairman), Dr. Thomas Oliver, Mr. E. Gould and Mr. H. J. Cameron (inspectors of factories), and Mr. H. J. Tennant (secretary). Potteries: Dr. Arlidge (chairman), Mr. W. D. Spanton, F.R.C.S. Edin., Mr. A. P. Laurie, Captain May, Mr. W. D. Cramp and Mr. J. H. Walmsley (inspectors of factories). Quarries: The Hon. W. W. Vivian (chairman), Mr. W. A. Darbyshire, Mr. J. J. Evans, Mr. W. J. Williams, Mr. Le Neve Foster and Mr. F. H. Wardell (inspectors of mines), and Mr. H. S. Richmond (inspector of factories).

*The Opium Commission.*

It seems probable that the Opium Commission, which was originally intended to consist of nine members, may have to be enlarged, since it would appear to be desirable that another gentleman opposed to the opium traffic, in addition to the two of the same way of thinking already nominated, should be placed on the Commission.

*The Vaccination Bill.*

This measure retains its place amongst the orders of the day but there is little prospect at present of an opportunity being found for its discussion. It cannot be taken after midnight because by virtue of the notices given by Dr. Farquharson and Dr. MacGregor, it ranks as an opposed Bill and all the time before midnight is required by the Government for other purposes.

*The Visitors in Lunacy.*

In the House of Lords on Tuesday a report was presented to the Lord Ch[illegible] of the number of visits made, the number of patients seen, the number of miles travelled by the Visitors in Lunacy between Ja[illegible] 1st and June 30th of the present year.

## THE HOUSE OF LORDS.

FRIDAY, AUG. 4TH.

*The Housing of the Working Classes Act (1890) Amendment Bill.*

This Bill was read a third time and passed.

*Blind and Deaf Children.*

On the consideration in Committee of the Elementary Education (Blind and Deaf Children) Bill, Lord Sandford proposed to insert a new subsection in Clause 5 to provide that "in granting or withholding their consent under this section, the Education Department shall take into consideration the sufficiency of the accommodation available for blind and deaf children in existing schools." After the Earl of Kimberley had signified the non-concurrence of the Government with the amendment, the Committee divided and by a majority of 5 the clause as amended was added to the Bill, which, after some discussion, was reported.

TUESDAY, AUG. 8TH.

*The University of Wales.*

In answer to the Bishop of Bangor, the Earl of Kimberley said the charter for the University of Wales was already in print and would be circulated on Wednesday.

*Scottish Universities' Commission.*

In reply to Lord Sandford, who asked when the ordinances of the Scottish Universities commissioners were likely to be circulated, the Earl of Kimberley stated that the papers were sent from Edinburgh on Saturday last.

## THE HOUSE OF COMMONS.

THURSDAY, AUG. 3RD.

*The Treatment of Inebriates.*

Mr. Knowles asked the Home Secretary if he would introduce at an early date a Bill to carry out the report from the Departmental Committee on the treatment of inebriates.—Mr. Asquith said he could not hope to deal with the subject this session, but he was giving instructions to have a Bill drawn which would embody the main recommendations of the Committee, and he trusted that legislation in that direction would be found possible next year.—Mr. Knowles asked whether the right hon. gentleman would not introduce the measure this session, in order that members might see and discuss it.—Mr. Asquith said he could not undertake to promise that.

*The Pollution of the Nile.*

Mr. Pierpoint asked the Under Secretary of State for Foreign Affairs whether his attention had been drawn to a recent article on the pollution of the Nile wherein it was stated that by the construction of dams in the Delta the current was in some places entirely stopped, and that, in consequence, poisonous filth accumulated and putrefied in the reaches; whether the water in these reaches was in nearly all cases the only drinking-water; whether he was aware that it had been shown by Dr. Green Pasha that during recent years the mortality during the summer months had in consequence largely increased; and whether he would draw the attention of the Egyptian Government to the state of the Nile in the Delta.—Sir Edward Grey replied that he had not read Dr. Green's report. He was informed that the drinking-water in the Delta came from the Nile or from canals fed by the river, but the point raised in the question was one which primarily concerned the Egyptian Government who had in their service competent advisers for the consideration of such matters.

*Small-pox and the Public Health Acts.*

Mr. H. Fowler, in reply to a question put by Mr. J. Wilson, said the Public Health Acts do not authorise the payment by sanitary authorities of compensation in a case in which, in consequence of the appearance of small-pox in a household, a person cannot follow his ordinary occupation without risk of communicating the disease to others.

*The Contagious Diseases (Swine Fever) Bill.*

Mr. Gardner moved the second reading of the Contagious Diseases (Animals) (Swine Fever) Bill. He said the Bill gave effect to the wishes of agriculturists in the United Kingdom that the Government should take over the administration by local authorities of the means to suppress swine fever. The measure would therefore transfer to the Board of Agriculture the duty of stamping out the disease.—Mr. T. W. Russell objected to the further progress of the Bill on the ground that it ought to have been brought forward before twelve o'clock. The motion for the second reading was then postponed.—On the 7th inst. a discussion arose on the financial aspects of the above-mentioned Bill, when a motion by Mr. Chaplin, on the order for the second reading of the Bill, was postponed till the 8th inst. On this day, however, the Bill was, in pursuance of an arrangement to that effect, read a second time.

MONDAY, AUG. 7TH.

*Scarlet Fever at Harrow.*

Mr. Macfarlane called attention, by a question addressed to the President of the Local Government Board, to the scarlet fever epidemic which had prevailed in Harrow school.—Mr. H. Fowler corroborated the facts as stated in the question, but did not consider the circumstances were such as to necessitate an inquiry. In that opinion he was sustained by the advice of the medical officer of the school as well as by Sir William Broadbent.

*Police and Sanitary Regulations Bills.*

In reply to a question put by Sir C. Dilke, Mr. H. Fowler stated that the committee on the above-mentioned Bills had been appointed for several years with unanimity. The purpose of the appointment was to prevent local authorities from interfering with the general law of the land. As the appointment was an annual one it would be in the power of any member to oppose such appointment in the following session or to raise objections thereto.

TUESDAY, AUG. 8TH.

*Army Medical Officers.*

Questions bearing on the Army Medical Service were replied to by Mr. Campbell-Bannerman.—In the first instance Sir J. Leng asked if the War department had restricted the selection of medical and surgical examiners for the competitive examinations for admission to the Army Medical Service solely to the examiners of the two London Colleges of Physicians and Surgeons; whether a large proportion of the medical staff held Scottish diplomas as their only qualification; and why a monopoly was now to be conferred on the London medical schools to the detriment of other medical corporations of the United Kingdom.—To this question the Secretary of State for War replied that no such restriction was intended; but the first list of examiners under the new system had been selected from the Colleges named partly on the ground of their accessibility. Probably after the lapse of four years, for which the term of office continued, the new examiners would be taken from the Scottish or Irish Colleges.—Other members also spoke on the subject.—Subsequently Dr. Farquharson put a question to the right hon. gentleman respecting the changes which had taken place in the tenure of the principal medical officership of certain districts which he named.—Mr. Campbell-Bannerman, in reply, gave a list of the changes referred to, and stated that those changes, with one exception, were necessary as a consequence of the officers reaching the age for compulsory retirement, or of being required to relieve officers abroad who had to retire or who had completed their prescribed tour of foreign service.

THURSDAY, AUG. 10TH.

*Poor-law Board and Friendly Societies.*

Mr. Strachey asked the President of the Local Government Board whether he had power to issue an order giving boards of guardians leave to grant, where desirable, outdoor relief to members of a friendly society without deducting all or any allowance received by them from such society, and, if so, whether he would at once issue such order.—Mr. Henry Fowler replied that this question had from time to time been considered most carefully by the Poor-law Board and the Local Government Board. He was advised that the Local Government Board were not empowered to issue such an order as the hon. gentleman referred to in his question. Such an order, he might be allowed to point out, could not be limited in its application to the one class of thrift indicated—namely, contributors to a friendly society. At the same time, it was not unusual to take into account a portion only of the weekly sum received from a friendly society. The subject, which was one of considerable difficulty, had been brought under the notice of the Royal Commission on the Aged Poor, and the Local Government Board were bound to wait until their report was issued before making any legislative proposals.

*Medical Attendance for the Irish Constabulary.*

Mr. Patrick Joseph O'Brien asked the Chief Secretary to the Lord Lieutenant of Ireland if he would state out of what fund the medical attendants to the Royal Irish Constabulary were paid in the several districts in Ireland, whether from Government sources or from a fund subscribed for the purpose by the members of the force.—Mr. John Morley replied that the allowances for medical attendants were paid out of the vote for the constabulary.

## BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL & COX, King William-street, Strand, London.

Movable Kidney and Intermitting Hydronephrosis: A Thesis for the Degree of M.D. Aberdeen. By G. D. Knight. 1893. pp. 129.

BEAL, J. C., William-street, Brisbane, Queensland.

Notes on Some of the More Common Diseases in Queensland, in relation to Atmospheric Conditions, 1887–1891. Illustrated by Charts. By David Hardie, M.D. 1893. pp. 132.

CHURCHILL, J. & A., New Burlington-street, London.

A Manual of Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.S. Second Edition. Vol. II. 1893. pp. 1069. Price 20*s.*

Introduction to the Catalogue of the Collection of Calculi of the Bladder. By Sir H. Thompson, F.R.C.S., M.B. Lond. 1893. pp. 39. Price 2*s.* 6*d.*

Heath's Practical Anatomy: A Manual of Dissections. Edited by William Anderson, F.R.C.S. Illustrated. Eighth Edition. 1893. pp. 744. Price 15*s.*

HEYWOOD, J., Manchester and London.

Buxton: Its Baths and Climate. By Samuel Hyde, M.D., L.R.C.P., M.R.C.S. 1893. pp. 134.

HIRSCHWALD, AUGUST, Berlin.

Practicum der Physiologischen und Pathologischen Chemie. Von Dr. E. Salkowski. 1893. pp. 314.

Lehrbuch der Speciellen Pathologischen Anatomie. Von Dr. J. Orth. 1893.

HUDSON & KEARNS, Southwark-street, London, S.E.

Handbook of Cardiff, Penarth and Environs. 1893.

MOHR, J. C. B., Freiburg, I. B., und Leipzig.

Der Bau des Menschen als Zeugniss für Seine Vergangenheit. Von Dr. R. Wiedersheim. 1893. pp. 190.

PENTLAND, YOUNG J., Edinburgh and London.

The Mineral Waters of Harrogate. By J. Liddell, M.D. Edin. 1893. pp. 62.

The Journal of Pathology and Bacteriology. Edited by S. G. Woodhead, assisted by Others. Vol. I. 1893. pp. 500.

Guide for Medical Students: by the Registrar of the Catholic University School of Medicine, 1893–94 (Browne & Nolan, Dublin).—Ancient Egyptian Medicine: a Bibliographical Demonstration in the Library of the Faculty of Physicians and Surgeons of Glasgow, Jan. 12th, 1893, by Jas. Finlayson, M.D.; reprint (A. MacDougall, Glasgow, 1893).—Herophilus and Erasistratus: a Bibliographical Demonstration in the Library of the Faculty of Physicians and Surgeons of Glasgow, March 16th, 1893, by James Finlayson, M.D.; reprint (A. MacDougall, Glasgow, 1893).—Sonderabdruck aus: Therapeutische Monatshefte, 1893, Juli (Julius Springer, Berlin, N.).—Il Magnetismo negli Animali e Nelle Piante: Dott. V. Allara (U. Chiesa e F. Guindani, Milano, 1893).—On Feeding of Infants: by Henri Nestlé (Depôt, Snow-hill, London, E.C.).—Punctured Wounds of the Feet: by S. C. Plummer, A.M., M.D.; Reprint from the *Chicago Medical Recorder*, June, 1893 (The McCluer Printing Company, Chicago).

# Appointments.

***Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.***

ADAMS, J., M.D. St. And., M.R.C.S., has been reappointed Medical Officer of Health for the Barnes Sanitary District of the Richmond Union.

BEACH, FLETCHER, M.B., F.R.C.P. Lond., has been appointed Physician for Out-patients at the West-End Hospital for Nervous Diseases, Epilepsy and Paralysis, Welbeck-street.

BELLAMY, HENRY REYNELL, L.R.C.S., L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Honorary Surgeon to the Stockport Infirmary, vice W. E. Bailey, resigned.

BIRD, B. K., L.R.C.P., L.M., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Certifying Surgeon for the Horsham District, Victoria, Australia.

BRADFORD, W. G. H., B.A., M.B., B.C. Cantab., has been appointed House Physician to the Brompton Hospital for Consumption and Diseases of the Chest.

BROCKBANK, EDWARD MANSFIELD, M.D. Victoria, has been appointed Resident Medical Officer at the Manchester Royal Infirmary.

BROOK, W. F., JUN., F.R.C.S., L.M., has been appointed Medical Officer at the Swansea Hospital.

CARR, JOHN WALTER, M.D., B.S. Lond., M.R.C.P., F.R.C.S., has been appointed an Assistant Physician at the Royal Free Hospital, Gray's-inn-road, W.C.

DIXON, ARTHUR, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Eighth Sanitary District of the Preston Union.

DONNELLAN, J. N., M.B., B.Ch., B.A.O. Irel., has been appointed Medical Officer for the Waltham St. Lawrence Sanitary District of the Cookham Union.

DONNELLY, W. T. B., M.B., B.S. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to the Brompton Hospital for Consumption and Diseases of the Chest.

FERGUSSON, W. B., M.D., C.M. Aberd., has been appointed Medical Officer for the Sixth Sanitary District of the Stroud Union.

FOWLER, J. S., M.B., C.M. Edin., L.R.C.P. Lond., M.R.C.S., has been appointed Resident Medical Officer to the Edinburgh Sick Children's Hospital.

HALPIN, J. E., L.R.C.S., L. & L.M., K.Q.C.P. Irel., has been appointed Medical Officer to the South Normanton Colliery Company.

HAYDON, T. H., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Marlborough Urban Sanitary District of the Marlborough Union, vice Cooper.

HEY, H. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Buckland Sanitary District of the Faringdon Union.

HIGGINS, C. H., M.D. St. And., M.R.C.P. Lond., F.R.C.S., has been appointed Medical Officer of Health for the Cleckheaton Urban Sanitary District of the North Bierly Union, vice Morrison.

JONES, H., L.S.A., D.P.H. Camb., has been appointed Medical Officer for the Borough of Crewe.

KENDALL, H. W., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to the Great Northern Central Hospital, Holloway-road, N.

LANE, JOHN, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer *pro tem.* for the Timoleague Dispensary District, Cork.

LIMONT, JAMES, M.A., M.B., B.Sc., M.R.C.P., has been appointed Physician in Charge of the recently instituted department for Diseases of the Skin at the Royal Infirmary, Newcastle-on-Tyne.

LINES, D. H. E., M.B., Ch.B. Melb., has been appointed a Public Vaccinator of Woodend, Victoria, Australia.

MASON, WM., L.R.C.P., L.M., L.R.C.S. Edin., has been reappointed Medical Officer of Health for the St. Austell Rural and Urban Sanitary Districts.

MANNING, N. S., L.R.C.P., L.M., F.R.C.S. Irel., has been appointed Medical Officer for the Eighth Sanitary District of the Barnstaple Union, vice G. H. Manning.

MUIR, WILLIAM CHARLES CRAWFORD, M.B., C.M. Glas., has been appointed Public Vaccinator for the District of Portarlington, Victoria, Australia.

PEACHEY, G. C., L.R.C.P., L.R.C.S., L.M. Edin., L.F.P.S. Glas., has been appointed Medical Officer of Health for the Rural Sanitary District of the Wantage Union.

PIMLEY, THOS., M.B., C.M. Aberd., has been appointed Medical Officer for the Fulwood Workhouse of the Preston Union.

RIDLEY, WALTER, M.B., M.S., F.R.C.S., has been appointed Surgeon in Charge of the recently instituted department for Diseases of the Throat and Ear at the Royal Infirmary, Newcastle-on-Tyne.

ROBERTS, J. DUNGEY, M.R.C.S., L.S.A. Lond., has been appointed Medical Officer to the Ealing Cottage Hospital and Provident Dispensary, vice Dr. Warwick C. Steele, resigned.

STEPHENS, J. W., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon in the Cardigan District under the Factory Acts, vice Davies.

STEVENS, P. R., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Braintree Rural and Urban Sanitary Districts, vice Abbott.

WATSON, J. W., M.D., Ch.M. Irel., has been appointed Health Officer, *pro tem.*, for the Seymour and Tallarook Ridings of Seymour, Victoria, Australia.

WOODS, G. T. L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas., has been appointed Medical Officer of Health for the Ripley Sanitary District of the Knaresborough Union, vice Saunders.

# Vacancies.

*For further information regarding each vacancy reference should be made to the advertisement (see Index).*

ANDERSON'S COLLEGE MEDICAL SCHOOL, Glasgow.—Chair of Materia Medica.

ANDERSON'S COLLEGE MEDICAL SCHOOL, Glasgow.—Chair of Physics.

BRIGHTON, HOVE AND PRESTON DISPENSARY, Brighton.—House Surgeon for the Northern Branch. Salary £140 per annum, with furnished apartments, coals, gas and attendance.

CUMBERLAND INFIRMARY, Carlisle.—Assistant House Surgeon for one year. Salary £40 per annum, with board, lodging and washing.

GENERAL HOSPITAL, Birmingham.—House Physician for one year. Salary £70 per annum, with residence, board and washing.

LONDON COUNTY ASYLUM, Claybury, Woodford, Essex.—Fourth Assistant Medical Officer, unmarried. Salary £150 per annum, rising by £5 a year to £160, with board, lodging and washing.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—House Surgeon for six months. Salary at the rate of 50 guineas per annum, with residence in the hospital, board and washing.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Junior House Surgeon for six months. Residence in the Hospital, with board and washing provided, and an honorarium of 5 guineas on satisfactory completion of term of appointment.

NATIONAL DENTAL HOSPITAL, Great Portland-street, W.—Assistant Dental Surgeon.

RADCLIFFE INFIRMARY, Oxford.—House Physician. Salary £80 a year, with board, lodging and washing.

ROYAL INFIRMARY, Hull.—Senior House Surgeon, unmarried. Salary £105 per annum, with board and furnished apartments.

ROYAL UNITED HOSPITAL, Bath.—House Surgeon for one year. Salary £60, with board, lodging and washing.

SHEFFIELD SCHOOL OF MEDICINE.—Tutor, to take Charge of Dissecting-room and hold Classes in Anatomy and Physiology. Salary £125.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant for six months. Board and residence provided.

TAUNTON AND SOMERSET HOSPITAL, Taunton.—Qualified Dispenser. Salary £100.

TOWNSHIP OF MANCHESTER.—Resident Assistant Medical Officer at the Workhouse of the Township at Crumpsall. Salary £100 per annum, with furnished apartments, fire, light, washing and attendance. Applications to the Clerk to the Guardians, Poor-Law Offices, New Bridge-street, Manchester.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House Surgeon for one year, who will also be required to act as Surgical Registrar. Salary £100, with board, lodging and washing.

WORCESTER COUNTY AND CITY LUNATIC ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £100 per annum, with board, lodging and washing. Applications to Dr. Cooke, The Asylum, Powick, near Worcester.

# Births, Marriages and Deaths.

## BIRTHS.

BALL.—On Aug. 6th, at Upper Wimpole-street, W., the wife of James B. Ball, M.D., of a son.

ELAM.—On Aug. 2nd, at Upper Montague-street, Russell-square, W.C., the wife of George Elam, M.B., B.S., of a daughter.

FINLAYSON.—On Aug. 4th, at Applegarth-road, Brook-green, W., the wife of H. W. Finlayson, M.B., R.N., of a daughter.

SHORTRIDGE.—On Aug. 5th, at Honiton, Devon, the wife of Thomas Wood Shortridge, M.D., of a son.

STAVELEY.—On August 9th, at 13, South Eaton-place, S.W., the wife of W. H. C. Staveley, F.R.C.S., of a son.

WIGLESWORTH.—On Aug. 3rd, at Rainhill, Lancashire, the wife of Joseph Wiglesworth, M.D., of a son.

## MARRIAGES.

CHARLES—AYRTON.—On Aug. 3rd, at St. John's Church, Ladbroke-grove, Thomas Cranstoun Charles, M.D., M.R.C.P. Lond., to Julia Minna Nugent Ayrton, only daughter of the late Edward Nugent Ayrton, M.A., Barrister-at-law.

CRAMPTON—BERRIDGE.—On Aug. 2nd, at Ratley Church, Thomas Hobbs Crampton, L.R.C.P., L.R.C.S. Irel., Myddleton-square, London, to Augusta, youngest daughter of Thomas W. Berridge, The Uplands, Banbury.

CRICKITT—WEIR.—On Aug. 1st, at St. John's Church, Upper Norwood, Henry Halkett Crickitt, Surgeon, son of Captain G. A. Crickitt, Governor H.M. Prison, Lewes, to Agnes Howie Weir, eldest daughter of the late J. G. Megaw of Upper Norwood.

EDWARDS—BATCHELOR.—On Aug. 3rd, at St. Augustine's Church, Penarth, by the Rev. E. S. Roberts, B.A., W. T. Edwards, M.D., F.R.C.S., J.P. Cardiff, to Edith Evangeline (Eva), daughter of the late John Batchelor and Mrs. Batchelor, The Upper Cliffs, Penarth.

FOSTER—GARDINER.—On July 26th, at St. Peter's, Brockley, by the Rev. C. H. Grundy, Vicar of the parish, assisted by the Rev. W. H. Stone, Vicar of St. James's, Hatcham, and the Rev. H. St. Maur Willoughby of St. Luke's, Peckham, Dr. William Joscelyn Foster of Wickham-road, Brockley, to Sophie Maud, only daughter of James Henry Gardiner of Wilna, Russia.

JACOB—HUNTON.—On Aug. 8th, at Christ Church, Ellacombe, Torquay, by the Rev. J. Congreve, assisted by the Rev. Muschamp Vickers, Henry William, son of William Beale Jacob, of Ballybrack House, Co. Dublin, to Charlotte Elizabeth, daughter of Thomas Hunton, of Bronshill, Torquay. No cards.

LANSDOWN—GRIFFITHS.—On Aug. 9th, at Holy Trinity, Kilburn, N.W., Robert G. Poole Lansdown, M.D., B.S., of Clifton, Bristol, to Alice Anna, daughter of the late Thomas Griffiths of Cardigan.

STOCKER—PARIS.—On Aug. 2nd, at St. John's Church, Notting-hill, Walter Woodley Stocker, M.R.C.S., M.R.C.P. Lond., of Willesden-green, to Constance Emily, daughter of Mrs. de Paris, of Clarendon-road.

## DEATHS.

ANSTED.—On Aug. 3rd, at Boscastle, Cornwall, Hugh Leslie Ansted, M.R.C.S., L.R.C.P. of Madras, aged 36.

DOWNES.—On Aug. 2nd, at Moreton-villa, Kentish-town-road, N.W. Denis Sydney Downes, M.D., aged 50 years. R.I.P.

DURHAM.—On Aug. 6th, at the London Fever Hospital, of virulent diphtheria, contracted whilst on duty as Acting Resident Medical Officer, Arthur Ellis Durham, M.A., M.B., B.C. (late scholar of Christ's College, Cambridge and student of Guy's Hospital), aged 28, eldest son of Arthur E. Durham, F.R.C.S., of 82, Brook-street, W., and Guy's Hospital.

HORNER.—On Aug. 3rd, suddenly, Arthur Claypon Horner, M.R.C.S., of Tonbridge.

PRANCE.—On Aug. 9th, at Glencairn, Frognal-avenue, Robert Rooke Prance, M.D., of Hampstead and Great Washbourne, Gloucestershire, aged 67.

ROE.—On Aug. 6th, at Taunton House, Upper Norwood, Surgeon-Major P. H. Roe, A.M.S., in his 70th year.

SMITH.—On Aug. 7th, at Ocklynge-avenue, Eastbourne, John Harmer Smith, L.R.C.P., aged 82.

YOUNG.—On Aug. 2nd, at Ainslie-place, Edinburgh, James Young, M.D., L.R.C.S. Edin., F.R.S.A. & F.A.S. Scotland.

*N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths*

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET Office, August 10th, 1893.

| Date. | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Dry Bulb. | Wet Bulb. | Solar Radia in Vacuo. | Maximum Temp. Shade. | Min. Temp | Rainfall. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Aug. 4 | 29·70 | S.W. | 65 | 63 | 112 | 73 | 61 | ·06 | Cloudy |
| ,, 5 | 29·81 | W. | 63 | 60 | 117 | 72 | 55 | ·95 | Cloudy |
| ,, 6 | 30·12 | S.W. | 60 | 57 | 106 | 72 | 52 | ·02 | Cloudy |
| ,, 7 | 30·11 | S.W. | 64 | 62 | 121 | 80 | 58 | ·01 | Overcast |
| ,, 8 | 30·13 | S.W. | 69 | 65 | 125 | 85 | 60 | -- | Hazy |
| ,, 9 | 30·05 | S.E. | 70 | 67 | 121 | 84 | 64 | . | Hazy |
| ,, 10 | 29·91 | S.E. | 71 | 68 | 121 | 83 | 67 | ·67 | Cloudy |

# Medical Diary for the ensuing Week.

### Monday, August 14.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays, at the same hour.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; and on Tuesday, Wednesday, Friday, and Saturday at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2.30 P.M.; Friday, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M.; and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.; and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL. Ear and Throat Department, 9 A.M.; Thursday, 9 A.M. Eye Department, 2 P.M.

### Tuesday, August 15.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Skin Department, 1.45; Saturday, 9.15.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electrotherapeutics, same day, 2 P.M.

### Wednesday, August 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday and Saturday, same hour.
ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M. Dental Department, 9.30 A.M. Eye Department, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

### Thursday, August 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Ear and Throat Department, 9 A.M. Eye Department, 2 P.M.

### Friday, August 18.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Eye Department, 2 P.M.

### Saturday, August 19.

UNIVERSITY COLLEGE HOSPITAL.—Skin Department, 9.15 A.M.

# Notes, Short Comments & Answers to Correspondents.

## EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*Lectures, original articles, and reports should be written on one side only of the paper.*

*Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*We cannot prescribe or recommend practitioners.*

*Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."*

*Letters relating to the publication, sale and advertising departments of* THE LANCET *should be addressed "To the Publisher."*

*We cannot undertake to return MSS. not used.*

## PUBLISHER'S NOTICE.

IN order to facilitate the work of reference to the volumes of THE LANCET, we have arranged to publish duplicate copies of the Index to each half-yearly volume in a form in which they may be subsequently filed or bound together. Those of our subscribers who may wish to be supplied with loose copies can obtain the same (without extra charge) on making application to the Publisher of THE LANCET.

### MEDICAL MEN AND NON-RESIDENT PAGES.

BY a decision of one of the magistrates of Liverpool, in the case of Dr. Edward Adam of Shaw-street, a medical man is required to take out an Excise licence for a pageboy who only opens the door and cleans boots and does not reside on the premises. Acting on the advice of his solicitors Dr. Adam had not taken out a licence for the page. The magistrates held that he was liable to pay.

*Query.*—It is not commendable for registered medical men to work practices for unregistered persons. Any one acting thus does so at considerable risk of a charge of covering.

### THE TREATMENT OF HYDROPHOBIA.

*To the Editors of* THE LANCET.

SIRS,—I venture to enclose for your perusal some pamphlets which reached me to-day by post. The whole thing seems to me to be an ingenious piece of quackery intended to drive anyone unlucky enough to get a dog-bite into taking a course of vapour baths at one or other of the establishments recommended, instead of consulting a medical practitioner at once or undergoing the Pasteur treatment. Perhaps, however, I am judging too harshly, and the pamphlets may emanate from the mistaken zeal of some anti-vivisectionists. It seems to me that the reverend gentleman who is about to visit London to "answer inquiries" will be sailing very near the wind as regards a prosecution for practising without a qualification. Apologising for troubling you with this letter,

I am, Sirs, your obedient servant,

London, Aug. 5th, 1893. E. G. Y.

### SENTENCE ON A BROMWICH MIDWIFE.

AT the Stafford Assizes, Fanny Moore, a Bromwich midwife, was sentenced to penal servitude for seven years for using instruments to procure miscarriage, the judge commenting severely on her conduct. The girl on whom the operation was performed was only fifteen years old. She survived the operation. The father of the child was the master of the girl. He debauched her and encouraged her to go to the midwife for an illegal operation, and was sent to penal servitude for five years. His wife, who ought to have been a sort of mother and protectress of the girl, was also found guilty and sentenced to eighteen months hard labour. The evidence went to show that Moore used knitting-needles of various sizes and operated "twice a day for a fortnight"—probably not using needles every time. Her charge was a guinea. The crime and the sentences will bring into prominence the shocking immoralities covered by the whole case, which in its moral and social aspects is somewhat appalling.

## "FIFTEEN TIMES TWINS."

*To the Editors of* THE LANCET.

SIRS,—When I was a resident medical officer in the Chester General Infirmary I knew an old lady in that city who was notorious as having been confined of twins fifteen times, besides some other single births. Her husband died lately, when his and his widow's lives were noticed in the local newspapers. I think that the old lady is still alive. She, poor soul, under some trying circumstances, lamented her lot—not that she had brought over thirty subjects to Her Majesty, but that thirty of them had not come in triplets, so that she might have been amenable to Royal bounty.

Two other cases of interest in fecundity I met with during my tenure of office. I attended a baby aged three months (who died) whose mother was then eleven years old. It was said that the girl-mother had been subjected to regular intercourse with a grown man since the age of eight years. As an instance of early conception the case was recorded in one of the medical journals. At Handbridge (just without the castle walls) I visited a fishwife who was nursing two babies—her own baby and her great-grandchild. The two intermediate generations I saw. The great-grandmother told me that she was sixteen when she was married, which, giving the same ages to her daughter and grand-daughter for the same events, would but make her forty-eight when I saw her.

I am, Sirs, yours obediently,

Denbigh, Aug. 1st, 1893. J. LLOYD-ROBERTS.

### HIGH NEGRO SURGERY.

THE newspapers give an account of a wound in the heart of a negro treated at Negro Hospital, Provident, U.S.A., by a negro surgeon and attended by negro nurses. The pericardium was found to have been opened. It was sutured, the arteries involved were tied, and the patient recovered. So the newspapers say, in their own American style.

*Mr. W. H. Paine.*—We know nothing of the persons named the Wolsey Company, 273, Strand, London.

## THE ETHICS OF CALLING.

*To the Editors of* THE LANCET.

SIRS,—May I ask your opinion, or that of any experienced reader of THE LANCET, on the following position. I am compelled by peculiar circumstances to begin residence when nearly sixty years of age in a town of 40,000 inhabitants. I do not expect or desire much general practice, and intend to put only "Dr. A. B." on my door-plate, yet shall welcome any crumbs that may fall from richer tables. What is the right and customary course for me to take in respect of the other practitioners? I am extremely anxious to do the strictly honourable thing.

I am, Sirs, yours obediently,

Aug. 8th, 1893. M.D.

*** The practice varies in different places and our correspondent will do well to ascertain the rule of the place.—ED. L.

### "HIS BLUSHING HONOURS THICK UPON HIM."

A PARAGRAPH in the *West Cumberland Times*, describing the academic triumphs of Dr. Charles Crerar and his intention to practise with his father, must occasion more blushes to him than even the honours themselves. We feel sure, however, that he is not personally responsible for the paragraph.

### HOTELS IN CHINA.

A VERY suggestive picture of the experiences undergone by a traveller in a Chinese hotel is given in a late number of the *Pall Mall Gazette*. The Chinese are not as a rule, we believe, noted for their strict observance of the rules of health, of which cleanliness in dress and in eating forms so important a part. The writer of the sketch in question, speaking of an inn in China, says the waiter is its chief glory. "This important functionary has that patronising air which distinguishes his *confrères* of the profession in other countries. The inevitable napkin always accompanies him. With it in summer he mops his sweating brow or bare shoulders, while in winter, wrapped around his head, it protects him from rain and wind. At all seasons of the year it is the only article he has with which to clean tables and chopsticks. Chinese landlords are reasonable in their charges, which to some degree offsets the unpleasantness of living in their inns."

### SUGGESTIONS FOR THE ABATEMENT OF DISCOMFORTS AT SEA.

*F.R.C.S. (Seaforth).*—The suggestions in the letter are very good, and travellers by sea can only feel obliged to a member of the profession for making them. Ordinary sufferers do not recognise such details and are too anxious to forget the whole subject as soon as they feel their feet on *terra firma*. Steamboat companies should use every effort to supply passengers with fresh air, fresh water and sufficient attendance; all unnecessary noises should be prohibited.

## INVALIDS AND RAILWAYS.

*To the Editors of* THE LANCET.

SIRS,—I was the other day consulted by a client who wanted, rightly or wrongly, to go to the seaside. There was no doubt but that she would be benefited if she could only get there without the physical fatigue incident to what would be, for her, the long walk from the station door to the railway carriage. In her case the galeties of a seaside residence would do more for her than the seaside itself. She went in spite of me, and I can only say that I trembled for the result. Now, Sirs, why should this be? Why should there not be postern doors at every railway platform through which the bashful invalid might for a little extra charge make his or her way across to the carriage door? There might be also an invalid chair at each station for the benefit of the more hardened. The minority of invalids, whose diseases have run to extremes, will not mind, but will allow themselves to be carried; but it is for the large majority I speak, who too often prefer to rot at home rather than submit their infirmities to the public gaze.

I am, Sirs, yours truly,

Cashel, Aug. 3rd, 1893. THOMAS LAFFAN.

### A FORTUNE BY CHANCE.

A KIEFF journal is quoted by the *Vrach* as announcing that a district surgeon has won between seven and eight thousand pounds in a lottery. It is to be hoped that this piece of good fortune (?) may not tempt a number of poor struggling practitioners in Russia and elsewhere to throw away their hard-earned savings on lottery-tickets.

### A DISCLAIMER.

*Mr. Herbert J. Frederick* writes to us that he is annoyed that some meddlesome person has inserted in a local paper his appointment as Senior Assistant Surgeon at the Great Ormond-street Hospital for Sick Children. Meddlesome persons are a very "numerous host." We sympathise with Mr. Frederick and gladly insert his disclaimer.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

---

**During the week marked copies of the following newspapers have been received:**—*Newcastle Daily Chronicle, Westerham Herald, Scottish Leader, Mining Journal, Reading Mercury, City Press, Weekly Free Press and Aberdeen Herald, West Middlesex Standard, Local Government Chronicle, Leeds Mercury, Citizen, Liverpool Daily Post, Bristol Mercury, Yorkshire Post, Indian Daily News (Calcutta), Cork Constitution, Le Courrier de la Presse (Paris), Times of India, Pioneer Mail, Builder, Architect, Law Journal, Sunday Times, Hertfordshire Mercury, Local Government Journal, Surrey Advertiser, Western Morning News, West Cumberland Times, West Middlesex Advertiser, Manchester Examiner, Health, Birmingham Gazette, Alliance News, Colonies and India, North British Advertiser, Daily Chronicle, Islington Gazette, Standard (Buenos Ayres), Beverley Guardian, Woman's Herald, Buxton Advertiser, Le Temps (Paris), Dundee Advertiser, Yorkshire Herald, &c. &c.*

## Communications, Letters &c. have been received from—

**A.**—Prof. Clifford Allbutt, Cambridge; Mr. F. W. Alexander, London; Mrs. Allen, Cardigan; Messrs. Armour and Co., London; Anderson's College Medical School, Glasgow, Dean of.

**B.**—Sir James Crichton Browne, London; Mr. Thomas Bryant, London; Mr. C. Barrow-Burt, Warwick; Mr. Ed. C. Bousfield, London; Mr. J. C. Brown, London; Messrs. Brown, Gould and Co., London; Messrs. R. Bentley and Son, London; Brighton and Hove Dispensary, Secretary of; Bath Royal United Hospital, Secretary of.

**C.**—Dr. S. B. Cook, Ramsgate; Mr. M. A. Core, Leicester; *Cornishman* (Penzance), Editor of; Central London Throat and Ear Hospital, Secretary of; Cantabriensis; Cantab, London.

**D.**—Messrs. Dawson and Sons, London; Dorset County Hospital, Clerk of; *Dominion Medical Monthly*, Toronto, Editor of.

**E.**—Messrs. Eason and Son, Dublin; Messrs. Evans and Co., Warwick; E. G. Y.; Enquirer.

**F.**—Mr. N. Hay Forbes, Tunbridge Wells; F.R.C.S., London.

**G.**—Gloucester General Infirmary, Secretary of; G. P., St. Austell.

**H.**—Dr. A. W. Hughes, Cardiff; Dr. M. M. Hagopian, Arabkir; Mr. R. Hughes, Bala; Mr. J. O. Hollick, Wellingborough; Mr. H. E. Hayward, Alfreton; Messrs. Hopkinson and Co., Nottingham; Messrs. Humphreys and Co., London; Messrs. Heywood and Co., Manchester; H., Folkingham.

**I.**—Dr. Robt. Ingle, Bedford.

**J.**—Dr. James Murphy, Sunderland; Mr. D. J. Jones, London.

**K.**—Mr. R. C. B. Kerin, London; Mr. R. R. Knowles, London.

**L.**—Dr. E. S. Lee, St. Leonards-on-Sea; Dr. Reginald H. Lucy, Plymouth; Dr. J. F. Little, London; Mr. C. H. Leet, Seaforth; Mr. Richard R. Leeper, Rathdrum; Mr. Thos. Laffan, Cashel.

**M.**—Dr. W. Murray, Malvern; Dr. Arthur Mac-Donald, Washington, U.S.A.; Mr. W. Martindale, London; Mr. G. H. Makins, London; Mr. James H. Menzies, London; Messrs. Maythorn and Son, Biggleswade; Medical Press Agency, London, Secretary of; Melbourne Medical Society, Hon. Secretary of; M.D., Edinburgh; M.O.H., London; Mars, London.

**N.**—Mr. Hy. Nestlé, London; Mr. T. Niven, Cardiff; Northern, London.

**O.**—Omega; Observer.

**P.**—Dr. J. F. Payne, London; Mr. W. H. Paine, London.

**R.**—Dr. W. Robinson, London; Mr. J. D. Roma, New York; Mr. J. C. Richardson, Herne Bay; Miss Ryes, Niagara; Messrs. E. W. Richards and Co., London.

**S.**—Dr. A. W. Stirling, Kingussie; Dr. H. Slorach, Bandon, co. Cork; Dr. Hyewood Smith, London; Mr. A. P. Scott, London; Mr. J. W. Stride, Brighton; Messrs. Street and Co., London; Schorne College, near Winslow, Warden of; Sigma, London; S., Malvern Wells; Sella, London; Sheffield School of Medicine, Hon. Secretary of; *Sharland's Trade Journal*, Editor of, Auckland, N.Z.

**T.**—Dr. R. Stanley Thomas, Plymouth; Messrs. T. Howard Lloyd and Co., Leicester; Taunton Hospital, Secretary of.

**U.**—Uno, London

**V.**—Victoria University, Leeds, Registrar of.

**W.**—Dr. G. J. Wilson, Oxford; Mr. H. White, Manchester; Messrs. Whitworth and Stuart, Manchester; Wonford House, near Exeter, Clerk of; Wire Wove Waterproof Co., London, Manager of; Worcester County and City Lunatic Asylum, Medical Officer of; Woodville, London.

**Y.**—Mr. Wm. A. Yeend, Lichfield.

## Letters, each with enclosure, are also acknowledged from—

**A.**—Dr. E. Allen, Hawes; Mr. R. R. Anderson, Carmarthen; G. Adolphus, Ventnor; Ashwood House, Kingswinford, Proprietor of; A., London; A. B. C., London; A. W., Coventry; Anglo-Swiss Condensed Milk Co., London; Accoucheur, London.

**B.**—Dr. F. Bagshawe, St. Leonards-on-Sea; Mr. C. T. Batchelor, Penarth; Mr. F. T. Bennett, London; Mr. H. Brice, jun., Exeter; Mr. W. H. Besant, Strathpeffer; B., London; Birkenhead Borough Hospital, Secretary of; Birmingham General Hospital, House Governor of;

**C.**—Mr. J. P. Conway, Cork; Class Rooms, Edinburgh; Colonial Mutual Life Assurance Society, London, Secretary of; C. X., London; Celsus, London; Cantab, London.

**D.**—Dr. J. H. Dewhurst, Skipton; Mr. Dunn, Crowthorne; Messrs. Day, Murray, and Spens, Glasgow; Deltoid, London; Derby County Asylum, Assistant Clerk of; *Daily Post*, Birmingham, Publisher of; Doctor, London.

**E.**—Mr. J. Evans, Beaufort; Mr. J. D. Evans, Victoria, Mon.

**F.**—Dr. W. J. Foster, London; Messrs. Ferris and Co., Bristol.

**G.**—Dr. H. L. Gordon, Ramsgate; Mr. Gibson, Wolverhampton; Mr. H. H. Gunnell, Wrexham; G. D., London; Genial, London; Glenburn, London.

**H.**—Dr. T. W. Hime, Bradford; Dr. G. Hollies, Wellington; Mr. J. A. Hughes, Holywell; Haydock Lodge, Ashton, Proprietors of; H. D., London; Hamilton Association, London.

**I.**—Iatros, London.

**J.**—Dr. H. M. Jones, London; Mr. R. T. Jones, Navigation.

**K.**—Mr. T. S. Keys, Gorseinon; Mr. C. S. Kirton, Leigh; K., London.

**L.**—Dr. R. Liveing, London; Mr. J. Logan, Glasgow; Mr. H. K. Lewis, London; Liverpool Royal Southern Hospital, Secretary of; Liverpool Stanley Hospital, Secretary of.

**M.**—Dr. D. Moutbrun, Trinidad; Mr. S. R. Merry, Hemel Hempstead; Medico, London; M. C., London; M.D., Brighton; Massage, London; Medicus, Derby; Medicus, Harpenden; Medicus, Leicester.

**N.**—Mr. E. Newson, Torquay; Nurse E., Banstead.

**O.**—Mr. T. B. O'Connor, London; Oxon, London; Organ, London; Ormodale, London.

**P.**—Practitioner, London; Park, London; Partridge, London.

**R.**—Dr. T. H. Redwood, Rhymney; Mr. T. E. Rice, Cosham; Mr. C. Rowe, Dorking; Messrs. Robinson & Sons, Chesterfield; Messrs. Reynolds and Branson, Leeds; R. S. O., London; R. L., Edinburgh.

**S.**—Dr. H. G. Stacey, Leeds; Mr. F. O. Stoker, Witley; Mr. H. M. Speechly, Park Gate; Mrs. Sheild, Dairy; St. Andrew's Hospital, Northampton, Secretary of; Surgeon, London; Statim, Chapel-en-le-Frith; Sheffield School of Medicine, Secretary of; Swansea Hospital, Secretary of; Senior London; S. S., London.

**T.**—Dr. J. A. B. Thompson, co. Derry; Mr. J. Thin, Edinburgh; Rev. A. Tooth, Croydon; Trapezoid, London.

**U.**—Dr. J. B. Unwin, Dunchurch; Urbanus, London.

**V.**—Vigo, London.

**W.**—Dr. F. Winter, Gateshead; Mr. E. Wright, Mold; Mr. J. Ward, London; Woodville, London.

**X.**—X., Dovercourt.

**Y.**—Yorkshire College, Leeds, Secretary of.


## SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year ..... £1 12 6 | Six Months ..... £0 16 3

TO THE CONTINENT, COLONIES, UNITED STATES, INDIA, CHINA, AND ALL PLACES ABROAD ..... One Year 1 14 3

"." In consequence of the new postal arrangements, the Annual Subscription for India, China, and all foreign countries will now be reduced to £1 14s. 8d., instead of £1 16s. 10d. as formerly.

Post Office Orders and Cheques should be addressed to The Publisher, THE LANCET Office, 423, Strand, London, and crossed "London and Westminster Bank, St. James's-square."

## ADVERTISING.

| | | | |
|---|---|---|---|
| Books and Publications (seven lines and under) | £0 | 3 | 0 |
| Official and General Announcements | 0 | 5 | 0 |
| Trade and Miscellaneous Advertisements | 0 | 4 | 0 |
| Every additional Line | 0 | 0 | 6 |
| Front Page per Line | 0 | 1 | 0 |
| Quarter Page | 1 | 10 | 0 |
| Half a Page | 2 | 15 | 0 |
| An Entire Page | 5 | 5 | 0 |

The Publisher cannot hold himself responsible for the return of testimonials &c. sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post Offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on pages 2 and 4, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

THE LANCET can be obtained at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom. Advertisements are also received by them and all other Advertising Agents.

Agent for the Advertisement Department in France—J. ASTIER, 65, Rue Caumartin, Paris.